

The Review of Metaphysics

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Articles

THE HIERARCHY OF ESSENCES *

MORTIMER J. ADLER

I

The object of this paper is to explicate the hypothetical proposition that if there are a number of essentially distinct kinds in the world of physical things, these specific natures or essences are ordered in a perfect hierarchy; and, beyond explication, to indicate what is involved in establishing the truth of this proposition.

The proposition is not that there are a number of essentially distinct species or natures in the world of sensible things. It asserts the existence of nothing, though its intention is to assert something that, if true, is necessarily true of really existent things. Should existences be found to have natures that are essentially distinct, then the natural kinds thus discovered will necessarily constitute a hierarchical order.

The hypothetical proposition under consideration has metaphysical import; but because it is hypothetical and asserts no real existence, it is a secondary proposition. It cannot be of primary interest to the philosopher, certainly not to the metaphysician, whose primary concern is with actualities not possibilities, with matters of fact or real existences not with the relations between ideas.

My reason for wishing to explain and, if possible, to prove this hypothetical proposition is that it lies between two primary propositions, one in metaphysics and one in the philosophy of nature. It is an indispensable connecting link between them. The metaphysical proposition asserts the existence of a plurality of individual physical substances, each composite of matter and form. The proposition in the philosophy of nature asserts the existence of a small number of natural kinds that are the specific or essential natures of these physical substances.

* Read at the third meeting of the Metaphysical Society of America, Yale University, March 22, 1952.

The hypothetical proposition concerning the hierarchy of physical essences or species, if any exist, cannot be explained, certainly not proved, without the understanding and truth of the metaphysical assertion that individual substances are composite of matter and form. And unless the hypothetical proposition concerning the hierarchy of essences is true, it is impossible, in my judgment, to establish that any two physical things are essentially distinct in kind. That hypothetical proposition is an indispensable premiss in the *a posteriori* or inductive argument from the observable attributes or actions of things to the conclusion that they have definably distinct essences.

Within the scope of this paper, I cannot engage in the elaborate argument that is required to establish the truth of the metaphysical assertion that individual physical substances exist. Fortunately, the truth of this affirmation, though it is needed for the affirmation of an existent hierarchy of essentially distinct kinds of physical substance, is not needed for the hypothetical statement that if there are essentially distinct natures or kinds, they must be hierarchically ordered. All that is required for the explanation and defense of that proposition is the conception of individual physical substances as composite of matter and form, together with certain consequences of that conception, such as the distinction of prime, common, and signate matter, the distinction of substantial and accidental form, and the difference between the unity of a definable essence or specific nature as constituted by common matter and substantial form and the unity of a sub-specific or individual nature as constituted by the addition of contingent accidents to the essential nature.

Nor can I, within the scope of this paper, present the even more elaborate argument that would be required to establish the real existence of a hierarchy of essences in the realm of physical substances. To do that would take a large chapter or series of chapters in the philosophy of nature. All I can do here is to show how the hypothetical proposition concerning the hierarchy of essences helps us to determine what observable traits shall be used as signs of unobservable properties and, through them, of definable essences.

Nevertheless, I do feel justified in using a portion of my limited space to picture the world as we would see it if our philosophical sights were set by supposing the three basic propositions so far mentioned to be true. Even though it is sketchily drawn, the picture may provide some concrete imagery for the term "hierarchy"; and, in addition, the contrast between this picture and other views of the natural order will indicate the philosophical significance of affirming or denying a hierarchy of essences.

In Section 'II, to follow immediately, I shall try, as briefly as possible, to do what I have just proposed. Then, in Section III, I shall undertake to summarize the argument for the hypothetical proposition concerning the hierarchy of essences. Finally, in Section IV, I shall conclude with some indication of the consequences of that proposition for the logic of definition and its use in the *a posteriori* or inductive demonstration of essential definitions.

II

If the three propositions that I think can be proved were accepted as true, the material world, viewed in the light of these propositions, would appear to have the following hang and shape.

We would see only certain of the objects that are commonly called "things" as the primary units of existence. We would not only distinguish between natural things and works of art, but even among natural things we would separate those which are natural unities from those which are mere aggregations of such units. Though we might still continue to use the word "thing" loosely for any object which had some enduring identity throughout a span of time and preserved that identity while changing in one respect or another, we would use it strictly only for those things which had the natural unity of an individual substance. We would be sure that each individual plant, brute animal, and man was such a substance, and we would see each of these as an ultimate subject of existence, a perishable subject of change, acting and suffering, and so both an agent and a patient in the causal interaction of things. The only place where our vision might blur or fail would be in

the realm of inorganic bodies, large or small. Here we might not be able to identify the true substantial unities as distinct from mere aggregations or quantities of such units.

Whether or not we could identify all the individual substances that there are, we would look for a definable essence only in such things as were individual substances; and accordingly we would expect to discover essential samenesses and differences only among substances. This would not preclude our finding other samenesses and differences among substances — in accidental respects and in degree. Yet among all the samenesses and differences we would find as we compared individual substances, only a certain number would constitute natural kinds, and of these only a very small number, indeed, would constitute the essential species of things.

This point about numbers takes us to the very heart of our picture of the world. It contains many more individual substances than it contains natural kinds, for in each natural kind there is a multitude of individuals, the same in essential nature and even in accidental type, yet differing from one another in their individual traits. Furthermore, of the natural kinds the world contains, many more are accidental types than essential species. There are, according to recent authoritative estimates, more than 800,000 types of animals and more than 200,000 types of plants called "species" by the taxonomist. If to these are added the various genera, phyla, families, and orders and the multitudinous sub-specific types, varieties or races, the total number of distinguishable kinds found in the world of living things is extremely large. But, according to a strict notion of essence, the animate world contains at most only three essentially distinct kinds or species — plant, brute, and man. Allowing for the obscurity of the inorganic world, I would, nevertheless, hazard the judgment that the 97 elements and the even more numerous compounds differ only accidentally or in degree and that all inanimate bodies are the same in essence. Hence in the whole world of material substances, there would be at most four essences or essential species and three essential distinctions. If upon further examination plant and brute animal life are reducible to the same essence, there would be only three essential natures and two essential distinctions.

The final truth about the precise number is less important than the order of the definable essences, be they three, four, or five. That order, as Aristotle remarks, is like the order of whole numbers or the order of regular plane figures (e.g., triangle, quadrangle, pentagon, etc.).¹ The analogy is, of course, imperfect because, not being substances, mathematical objects like numbers or figures do not, strictly speaking, have essences.² But Aristotle uses the analogy only to suggest certain properties of the hierarchical order of definable essences. Like the series of whole numbers or of regular plane figures, the order of definable essences is constituted by a set of terms each one of which is, by the ordering principle, higher or lower than another; or in other words, no two are equal. Between each pair of proximate terms there is a whole step of difference, permitting no fractional divisions or intermediates; and between each such pair there is only one essential difference, something possessed by the higher species and lacking in the lower, just as an integer differs from its neighbors either by the addition or subtraction of the number one.

So far the analogy goes, but no further. The series of positive integers starting with one is capable of infinite expansion by addition; but the hierarchy of definable essences is intrinsically finite: it not only has a lowest species, but a highest, at least so far as the world of material substances is concerned.³

¹ *Metaphysics*, VIII, 3, 1043^b35-1044^a9; *De Anima*, II, 3, 414^b28-32.

² See Aristotle, *Metaphysics*, VII, 5, 1031^a1-14.

³ "When we consider the infinite power and wisdom of the Maker, we have reason to think that it is suitable to the magnificent harmony of the universe, and the great design and infinite goodness of the architect, that the species of creatures should also by gentle degrees ascend upward from us toward his infinite perfection, as we see they gradually descend from us downwards; which, if it be probable, we have reason then to be persuaded that there are far more species of creatures above us than there are beneath; we being in degree of perfection much more remote from the infinite being of God than we are from the lowest state of being and that which approaches nearest to nothing" (Locke, *Essay Concerning Human Understanding*, Bk. III, Ch. 6, Sect. 12). The scale of beings above man here being considered by Locke is conceived by him as a hierarchy of immaterial substances or spiritual creatures. Cf. Aquinas, *Summa Theologica*, Part I, Q. 50, A. 4; and for the necessity of hierarchy in the realm of angels, see *ibid.*, Q. 47, A. 2; Q. 75, A. 7; and Q. 108, AA. 1-4.

The difference between any two proximate integers is always the same: the number one, added to the lower to constitute the higher, or subtracted from the higher to constitute the lower; but in the hierarchy of definable essences, the specifying difference is not the same between any pair of proximate terms. Most important of all, in the series of integers the differentiation of proximate terms is not accompanied by a generic sameness that is part of the definition of each member of the pair, whereas in the hierarchy of definable essences, the definition of each member of a pair of proximate species includes a common generic note as well as a differentiating note.

Connected with this last point is another which will help to complete the delineation of the hierarchy of essences. Of the three or four species in the hierarchy, only the highest is defined by two positive notes, one signifying the genus, the other the difference. All the inferior species are defined by a positive and a negative note, the negative note always signifying the difference. I shall subsequently try to explain the ontological significance of the fact that all species except the highest are defined by negative differentia and the fact that all positive differentia except the last, the one specifying the highest essential nature, are generic notes.⁴ For the present, I wish only to point out that these facts are simply consequences for logic of an ontological hierarchy constituted by essentially distinct and unequal grades of being, each higher nature having all the essential perfections to be found in its inferiors and, in addition, having an essential perfection not possessed by them.

As a result, the highest specific nature in the hierarchy of definable essences necessarily reflects within itself the whole hierarchy of essential perfections. Put concretely, human nature, which is the highest definable essence in the material order, virtually includes all inferior essences and the individual man actually possesses a hierarchy of powers that represents the order of essential perfections in all material substances.

Now supposing this picture of the order of nature to be true in its main outlines, let us consider the philosophical consequences of its being true. They seem to me far-reaching and

⁴ See Aristotle, *Metaphysics*, VII, 12.

profound. They affect our conception of man along with all the implications of that conception for moral and political theory. They affect our interpretation of all the facts relevant to a theory of natural evolution or origin of species, both accidental and essential species. They affect the logic of definition and induction, and along with that the position we take on the possibility of our knowing necessary truths about reality, over and above the self-evident axioms of metaphysics itself, such propositions, for example, as state the necessary connections between definable essences and deducible properties. From this one further consequence follows, namely, a sharper drawing of the line between a philosophical and an empirical science of nature in terms of the objects or problems with which each can and should be concerned.⁵

We can, perhaps, see some of these consequences a little more clearly if we consider the effect of contrary views of the world. To obliterate the picture we have been contemplating, we need only deny that there are any individual substances and affirm instead no reality except that of events, occurrences, phenomena, or the perpetual flux of experience. Or admitting that there are things in at least the sense of enduring identities, we need only deny that they differ from one another in any way except by degree, so that if there is any meaning at all to the word "essence" they would all be said to have the same essence. Nor is the effect considerably altered by admitting that there may also be a sense in which they differ in kind, if distinction in kind is thought of as merely the limiting case of difference in degree, and no meaning or reality is admitted for two modes of distinction in kind — essential and accidental.

All these denials lead to the same negative conclusions; namely, that there are no definable essences in the realm of real existences and hence no essential distinctions among whatever objects we identify as things. We cannot then affirm that

⁵ The sphere of philosophical inquiry with respect to physical nature is limited to the essential and necessary; the empirical sciences investigate the accidental and the contingent. For matters relevant to this division of labor, see my "Solution of the Problem of Species" in *The Thomist*, III, 2 (1941), pp. 365 ff.; and also Connolly, "Science vs. Philosophy" in *The Modern Schoolman*, XXIX, 3 (1952), pp. 197-209.

man is essentially distinct from other animals, or living things from non-living. We can take no exception to the postulate of the extreme evolutionist, which asks us to suppose that the whole of nature is a continuum of degrees of complexity in organization. We have no grounds for thinking that there are any demonstrable definitions, any certain inductions, or any necessary truths, the objects of which are natural kinds.

It may be objected at this point that I have omitted from this consideration of contrary views one which affirms the existence of individual substances and the reality of essential distinctions among them, but denies that essential kinds necessarily constitute the sort of hierarchy I have described.

I have omitted this possibility for two reasons. First, though I know that certain conceptions of individual substances do not include the notion of their being composite of matter and form, I fail to understand in what sense such substances can be said to have essences or to be essentially distinct from one another. I hope I may be forgiven for this failure and instructed on this point.⁶ My second reason is that on any conception of individual substances that does involve the notion of their being composite of matter and form, I hold that the principle of hierarchical ordering necessarily follows.

This necessary consequence is precisely what is asserted by the hypothetical proposition with which we began, and

⁶ Though Locke is unclear with regard to matter or substratum and certainly with regard to substantial form, he does have a conception of real essences that places the species of both material and immaterial substances in something like a hierarchy. But it is only "something like" a hierarchy, for he says that "the several species are linked together and differ but in almost insensible degrees" (*loc. cit.*, fn. 3 *supra*). There may be "something like" a conception of individual substances in Leibniz and Descartes; but I would find it difficult to say whether the monads have essences and accidents or how these are distinguished; and, in the case of Descartes, only man is composite of something like matter and form, but their Cartesian equivalents — body and mind — are themselves substances, each with its own essence. It is not clear to me whether, according to Descartes, the individual man has a definable essence; and it is even less clear to me how he would answer the same question about the individual horse or the individual rose. Nor do I find any notion of a hierarchy of essences in either Leibniz or Descartes.

which it is the purpose of this paper to explicate and prove. I shall now undertake that task, or at least whatever can be done toward its fulfillment in a brief statement of the analysis and argument.

III

I shall proceed to the solution of the problem in two steps. The first step involves both metaphysical principles and logical analysis; the second is almost entirely metaphysical argument.

In the first step we are concerned purely with the intelligibility, not at all with the reality, of a threefold distinction of the modes of differentiation. The notion of essence involved in the proposition concerning a hierarchy of essences presupposes a distinction between essence and accident, and the notion of natural kinds, essential and accidental, presupposes a distinction between difference in kind and difference in degree. Hence our first step is to discover the metaphysical requirements for and the logical formulation of these three modes of differentiation, as both possible and intelligible, whether or not real things actually differ in all three ways.

Let me begin with a statement that I think is almost axiomatic. No universe, real or possible, is intelligible unless it contains some samenesses and some differences. For any two things which exist or any two objects of thought, it must be true that they are the same in one or more respects and that they differ in one or more respects. They cannot be utterly the same and be two; they cannot be utterly different and be existences or thinkables.⁷

Sameness and difference are relational notions. Except, for the reflexible sameness of identity, sameness and difference are always found in or predicated of two or more

But any respect in which one entity is the same as different from another must also somehow be a respect in

⁷ The statement that every pair of entities or objects is the same in some respect and different in another applies only to entities or objects that are complex. Of simples all that can be said is that they are diverse, not that they are different. We cannot, for example, say that the differences in two definitions differ; we can only say that they are diverse or distinct.

which that entity is itself determinate; for what cannot be said in any way of a thing in itself cannot enter into the consideration of its sameness with or difference from anything else. Hence it becomes important to deal first with the respects in which each thing in and of itself can be determinate, before we consider these respects as the basis of differentiating two things from one another.

I shall use the word "perfection" to signify any distinct respect in which the being of a thing or the understanding of it can be completed or made more determinate. A total lack of perfections would, therefore, mean that absolutely indeterminate condition which is incompatible with actual existence or intelligibility. But the being of a thing may involve the privation of certain perfections, and the negation or exclusion of others. Staying within the range between the relatively unintelligible extremes of total or infinite perfection and total or infinite privation, it seems reasonable to say that if finite entities both are the same and also differ in their being or in our understanding of them, they cannot all have or lack the same perfections, or with respect to the perfections they share, have them exactly in the same way.

Now let us consider any two distinct perfections, X and Y. They can be related to one another in four ways, and these four seem to exhaust all possibilities. As I describe these four possible relations, permit me to assign names to them for use in the subsequent analysis.

1. X and Y may totally exclude each other, so that no entity which has one can have the other. Let me use the word "contrariety" to designate this relation, and let me call perfections so related "contraries." If A and B are two entities, and X and Y are contrary perfections, then if A possesses the perfection X, that precludes it from having the perfection Y. The reverse holds for B if it possesses the perfection Y. It is important to note here that A does not simply lack the perfection Y, or B the perfection X. Its being, as determined by the possession of one of two contrary perfections, definitely rejects the other. Its condition, with respect to the excluded contrary, is one of definite negation, not mere privation.

2. The perfection X may be related asymmetrically to the perfection Y in the following manner: whatever possesses X must also possess Y, but whatever possesses Y need not possess X, and this deficiency with respect to X may be a condition either of privation or negation. Let me use the word "cumulation" to designate this relation between perfections, and let me call X the "cumulative" perfection and Y the "accumulated" perfection.

3. The perfections X and Y may be inseparable, so that whatever possesses X must possess Y, and conversely.

4. The perfections X and Y may be coincident, in which case some entities may possess both and some may possess one without possessing the other, but the possession of one neither necessitates nor precludes the possession of the other. Hence in this case if A possesses X and lacks Y, or B possesses Y and lacks X, the lack must be simply privation rather than negation, for the perfections cannot be both contrary and coincident; since if they were contrary, there could be no third entity, C, which possessed both X and Y, as must be possible in the case of coincident perfections.

We can now eliminate from further consideration the third and fourth types of relation. Inseparable perfections function exactly as a single perfection does in the differentiation of two entities. Coincident perfections seem to combine contrariety and cumulation. This is possible only because contingency replaces necessity in the nature of the relations. If X and Y are coincident perfections, we cannot say that whatever has X must also have Y, but only that some entities may have both perfections; nor can we say that it is impossible for an entity having X to have Y, but only that it is possible for an entity to have X without having Y. Since the relation of coincidence is the weak contingent image of the first two strong relations involving necessity, it does not provide us with any additional grounds for the differentiation of things. Hence, so far as we are concerned with differentiation, we can eliminate coincidence from further consideration.

We are left then with three possible sources or roots of differentiation: 1. Two things may differ with respect to a

single perfection (or, what is the same, a set of two or more inseparable perfections); or 2, their difference may be somehow rooted in contrary perfections; or 3, in perfections related cumulatively.

Viewed logically, the signification of a difference between two entities must be expressed in one of three ways: 1. By a single term subject to quantitative variation; 2, by two terms, both positive; 3, by two terms, one positive and one negative. A positive term signifies the possession of a perfection; a negative term, the rejection or exclusion of a perfection. We shall see subsequently why, for differentiation, we do not need to employ privative as opposed to negative terms.

Now if we try to combine the three ways in which a difference between two things can be logically expressed with the three ways in which the difference can be rooted in perfections possessed or lacked by the things being differentiated, we find, after eliminating the six impossible combinations, only three possibilities.⁸ They are: 1. the difference between the two things may be rooted in one and the same perfection possessed by both in different quantities, in which case it will be signified by a single positive term with varying quantification that signifies more or less of the same; 2, the difference between the two things may be rooted in two perfections related by

⁸ The impossible combinations are as follows: 1. A single term varying quantitatively cannot be significantly combined with contrary perfections, nor 2, with cumulatively ordered perfections, since the more and less which gives difference in degree must be more and less of the same. 3. Two positive differences cannot be rooted in a single perfection, for that could provide no basis for their diversity; nor 4, can two positive differences be rooted in cumulatively ordered perfections, since the accumulated perfection is always co-present with the cumulative one, and so cannot be a source of difference. 5. Positive and negative differences cannot be rooted in a single perfection, for, since all difference is relative to sameness, a single perfection possessed by one thing and rejected by the other cannot account for their sameness as well as their difference. 6. Positive and negative differences cannot be rooted in contrary perfections, for contrary perfections can be the source of differentiation only if both are affirmed, not if one is negated. These six impossible combinations added to the three possible ones described in the text exhaust the nine combinations made by considering each of three factors in relation to each of three others.

contrariety, in which case it will be signified by two positive terms, each signifying the possession of one of the two contrary perfections; 3, the difference between the two things may be rooted in one of two perfections related cumulatively, that one being the cumulative perfection, in which case it will be signified by a positive and a negative term, the former signifying the possession, the latter the rejection, of that one perfection.

Of these three, the first is immediately seen to correspond to anyone's understanding of a difference in degree, while the second and third are as readily recognized to represent what everyone understands as a difference in kind. The clear mark of distinction between difference in degree and difference in kind is also at once apparent: a difference in kind occurs when one of two things has a perfection not possessed by the other (whether or not the other also has a perfection not possessed by the first), whereas a difference in degree occurs when two things possess unequal quantities of one and the same perfection.

From this point on, we shall be concerned only with the two possible ways in which things can differ in kind. Of these, the first is characterized by the symmetrical relation of contrariety between two perfections and by two positive differences, each rooted in one of the two contrary perfections. Let us call a difference in kind thus constituted mode Alpha. The second is characterized by the asymmetrical relation of cumulation between two perfections and by a positive and a negative difference rooted in one of these two, always the cumulative one, never the accumulated one. Let us call a difference in kind thus constituted mode Beta.

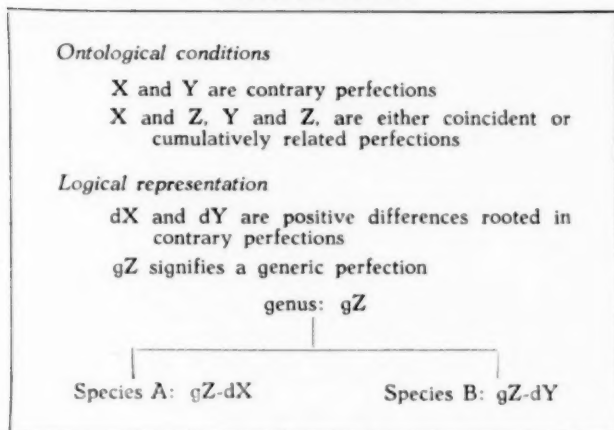
Now our problem is to show that mode Beta represents an essential difference in kind, and mode Alpha an accidental difference in kind. More precisely, we must show not simply *that* this is so, but *why* it *must* be so. If the asymmetrical character of the cumulative relation between the two perfections involved in mode Beta causes, as I think we shall see it does, the hierarchical order of the kinds thus differentiated, then showing why an essential difference in kind must be represented according to the pattern of mode Beta rather than mode Alpha

will succeed in showing why essential kinds must be hierarchically ordered.

Before we go on to this second and final step, one more preliminary piece of logical analysis is required. A kind is a definable species of thing. The definition of a species or kind, whether it be accidental or essential, involves stating a genus and a difference. In order not to beg the question about the essential as opposed to the accidental, let us use these three terms — "genus," "difference," and "species" — in the following manner. Let "genus" signify whatever is common to two kinds differentiated; *i.e.*, let it signify one or more perfections which the things being differentiated possess in common. Let "difference" signify a perfection (or a set of inseparable perfections) possessed by one kind and rejected by the other. Let "species" signify a kind as constituted by one or more perfections which it has in common with another kind, combined with the perfection, possessed or rejected, by which it is differentiated from that other. Hence whether the kind under consideration is essential or accidental, defining the species requires us to state its genus and its difference.

So far we have used all these terms — "genus," "difference," "species" and "definition" — with systematic ambiguity, so that they are equally applicable to all kinds, whether they are differentiated according to mode Alpha or mode Beta. Now let us remove that ambiguity by seeing the altered signification of these terms as we pass from one mode to the other. In mode Alpha, where contrary perfections are involved, each of two kinds being differentiated is specified by a positive difference, signifying a perfection distinct from the perfection in which the other positive difference is rooted. Furthermore, the genus common to the two species signifies a perfection distinct from both of the contrary perfections signified by the two positive differences. Hence in mode Alpha, the differentiation of two species involves three distinct perfections, of which each species possesses only two, the generic one and one of the contraries. Let A and B represent two species, X and Y contrary perfections, and Z the generic perfection. Species A is defined by the conjunction Z-X, and species B by the conjunction Z-Y.⁹

DIAGRAM ALPHA

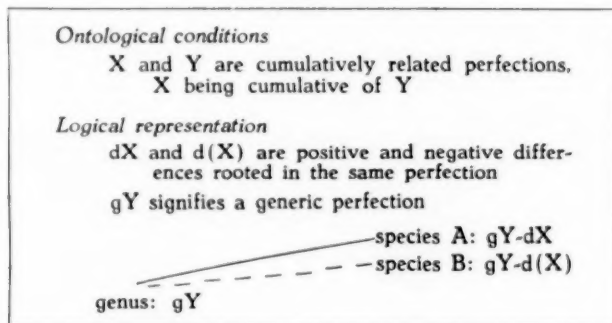


In mode Beta, where cumulation is the relation between the perfections, one of the two kinds being differentiated is specified by a positive, the other by a negative, difference rooted in the same perfection. Here as before the genus common to the two species signifies a perfection distinct from the perfection signified positively and negatively by the differences. Hence in mode Beta, the differentiation of two species involves two, not three, distinct perfections, of which one species possesses both and is, therefore, the higher, and the other possesses only one and is, therefore, the lower. Let A and B represent two species, with X a cumulative and Y an accu-

⁹ It may be asked how the generic perfection Z is related to the two contrary perfections X and Y. Of the four possible relations between perfections, two are at once seen to be impossible. Z cannot be contrary to either X or Y, for then the conjunctions Z-X and Z-Y would be impossible; nor can Z be inseparable from either X or Y, for then the disjunction of Z from X that is implicit in Z-Y, and the disjunction of Z from Y that is implicit in Z-X, would be impossible. Hence Z must be either coincident with X and Y, or be in a cumulative relation to them. If the latter, Z must be the accumulated perfection, and X and Y the cumulative ones. There is nothing intrinsically impossible about each of two contrary perfections being cumulative of the same perfection. Further analysis is required to discover whether both of these possibilities are realized in actual cases of differentiation according to mode Alpha, and if both are, under what conditions each is.

culated perfection. The higher species A is defined by the conjunction $Y-X$, and the lower species B by the conjunction $Y-(X)$, the parentheses indicating the negation of the enclosed term.^{9a}

DIAGRAM BETA



That differentiation according to mode Alpha does not permit species to be graded as higher and lower can be seen from the fact that each of the differentiated kinds possesses a perfection lacked by the other and lacks a perfection possessed by the other. They are, therefore, coordinate species in the genus to which they belong. That differentiation according to mode Beta makes one species supraordinate to the other follows from the fact that one possesses the perfection or perfections possessed by the other and in addition possesses a perfection lacked by that other. This fact not only causes one species to be higher than the other, but also is the key to the hierarchical ordering of all species thus differentiated.

We are now prepared for the final and more metaphysical step in the argument. It remains to show that essentially distinct

^{9a} If mode Beta provides the pattern of essential differentiation, we shall find, upon further analysis, that it is only in the division of the highest genus that essential differentiation produces two species. In all other cases, the division of a genus results in the definition of a species, on the one hand, and of a genus, on the other. See fn. 10 *infra*. But in these cases, the formal relation of the defined terms is the same as the formal relation of the two species defined by the division of the highest genus. The term that is defined by the positive difference is higher, the term that is defined by the negative difference is lower.

kinds must be differentiated according to mode Beta, and so will always be hierarchically ordered. In the course of doing this I hope to be able to answer two questions raised by the logical formulation of mode Beta. One concerns the ontological significance of the negative difference in the definition of the lower species. The other concerns the ontological significance of the genus, as that is united with a positive difference in the definition of the higher species and with a negative difference in the definition of the lower.¹⁰

The metaphysical argument can be summarized in seven propositions. All of them follow, I think, from the initial premiss that individual substances are composite of matter and form. But none of them is here shown to follow. I can do no

¹⁰ Taken together and generalized these questions ask about the real constitution of any specific nature except the highest in the hierarchy of essences, since only the highest specific nature in the hierarchy of definable essences is defined by a positive difference. The definitions of all other specific natures are constituted by negative differences. See fn. 9a *supra*.

If the whole hierarchy of genera and species thus conceived is projected in a diagram, such as the one presented in "The Solution of the Problem of Species" (*loc. cit.*, p. 317), and that diagram is compared with the traditional Tree of Porphyry, the comparison will discover this striking difference between them: in the Tree of Porphyry all terms, except "man," are generic, whether their definitions involve positive or negative differentia. For a criticism of the Porphyrian errors and an hypothesis concerning their source in Aristotle, see "The Solution of the Problem of Species" (*loc. cit.*, pp. 360-378).

With regard to the division of the highest genus *animal* into *brute* and *man*, Aquinas says: "*Rational* and *irrational* are differences dividing *animal*, constituting its various species" (*Summa Theologica*, Part I, Q. 77, A. 3). But in other passages, too numerous to cite, Aquinas treats *brute* or *irrational animal* as a genus, not a species. Hence with regard to corporeal substances, Aquinas does not seem to have a clear understanding of the hierarchy of definable essences or *infima* species; he does not seem to have rid his mind of the confusions and errors of Porphyry. However, with regard to spiritual substances, he seems to understand that a negative difference can enter into the definition of a species, not a genus. See *Of Being and Essence*, Ch. V, where he says that the division of intellectual substances need not be accomplished through two true (*i.e.*, positive) differences.

more than simply state them, without the requisite explanation or proof.¹¹

The propositions are: 1. The definable essence of an individual substance composite of matter and form is itself composite of matter and form.¹² 2. Whereas the matter of the individual substance is individual or signate matter and both substantial and accidental forms enter into its constitution, the matter of the definable essence is universal or common matter and only a substantial form enters into its constitution.¹³ 3. In the definable essence, as in the individual substance, the matter is to the form as potency is to act, or as determinability is to its determination, and the union of matter and form is the unity of an actualized potentiality.¹⁴ 4. The matter of the definable essence being common, not prime, it is not pure or infinite potentiality, but a definite or limited potentiality, a determinate determinability; and this requires that it somehow have some form. 5. The union of common matter and substantial form in the definable essence is the source of the unity peculiar to an essential definition, wherein the genus signifies the common matter and the difference the substantial form.¹⁵ 6. The whole essential difference between two kinds within a single genus lies in the diversity of their substantial forms, and what is essentially common to them must be found in matter that

¹¹ When I wrote "The Solution of the Problem of Species" I was unable to offer a direct proof of the hierarchy of essences. At that time it seemed to me that "the principle of perfect hierarchy [was] not readily susceptible to direct proof" (*loc. cit.*, p. 329). I offered instead an indirect proof, based on the assumption that we already know the essence of man and know that man is the highest of corporeal species. (See *ibid.*, pp. 329-350). But an indirect proof of the sort there advanced necessarily begs the question, since to prove the conclusion concerning hierarchy, it assumes the reality of the definition of man's essence, which itself cannot be proved unless the principle of hierarchy is true.

¹² See Aristotle, *Metaphysics*, VII, 10-11.

¹³ See *ibid.*, VII, 11, 1037^a 5-9; VIII, 3, 1043^b 28-33. Cf. Aquinas, *Summa Theologica*, Part I, Q. 85, A. 1, Reply 2.

¹⁴ See Aristotle's *Metaphysics*, VII, 12; VIII, 6. Cf. Aquinas, *Of Being and Essence*, Ch. 2-3.

¹⁵ See Aristotle, *Metaphysics*, V, 6. Cf. Aquinas, *Of Being and Essence*, *loc. cit.*

is determinately capable of being differently actualized by these diverse substantial forms. 7. Hence the form that gives the common matter signified by the genus its determinate determinability must be the same form that is signified by one of the two differences and cannot be contrary to the diverse form that is signified by the other difference.

The last proposition solves our problem. It enables us to see why, if there are kinds that are essentially distinct, they must be differentiated according to mode Beta and so are necessarily ordered as lower and higher in a hierarchy. This requires a word of further explanation.

Aristotle condenses the whole solution into the single statement that substantial forms cannot be related as contraries.¹⁶ If this is so, and if the whole essential difference between essentially distinct kinds lies in the diversity of their substantial forms, then it follows, of course, that essentially distinct kinds cannot be differentiated according to mode Alpha, in which there are two positive differences signifying contrary perfections. But Aristotle nowhere tells us why it is impossible for substantial forms to be related as contraries.^{16a} The explanation now to be given may provide that answer.

¹⁶ See Aristotle, *Categories*, Ch. 5, 3^b24-27.

^{16a} Unfortunately, in addition to not explaining why contrariety is impossible in the category of substance, Aristotle contradicts himself on this point in a number of places and in a variety of ways. See *Metaphysics*, V, 10; X, 4-8. It may be thought that the contradiction is partly removed by his statement that "the primary contrariety is that between positive state and privation" (*ibid.*, X, 4, 1055^a32). But even this is made questionable by the strict meaning assigned by him to "contrariety" in the four-fold division of *opposites* in his analysis of the post-predicaments. See *Categories*, Ch. 10. According to this analysis, the opposition between privatives and positives is clearly distinct from the opposition of contraries. It must, therefore, be in a loose sense of the word "contrary" that Aquinas says that "the differences which divide a genus are contrary to one another"; as is indicated by the immediately following qualification: "Contraries, however, are compared to one another as the perfect to the imperfect, *since the principle of contrariety is habit and privation thereof*" (*Summa Theologica*, Part I, Q. 75, A. 7).

But all this is unclear and unsatisfactory. In the strict sense in which there is contrariety between positive terms in the category of quality, there is absolutely no contrariety between positive terms — signifying substantial forms or essential perfections — in the category of substance. This, I take

The reduction to the impossible is best shown in the case of two essentially distinct kinds that are both species of the same genus.¹⁷ In the definition of the definable essence of each species, the difference must signify a diverse substantial form and the genus must signify the common matter. But, as we have seen, the common matter must be somehow informed, for otherwise it would be prime and totally indeterminate as well as infinitely determinable; furthermore, since it is common, not signate, and in potentiality to a substantial form, it cannot receive its determinate determinability from an accidental form. Hence a substantial form must be somehow present in the common matter, and the genus which is common to the definitions of the two species must therefore signify a substantial form as *somehow present* in the common matter.

Now the substantial form that is involved in the signification of the genus *either* must be identical with one or the other of the diverse substantial forms signified by the specific differences, or it must be diverse from both. *Let us begin by supposing that it is diverse from both.* Then, since a substantial

it, is the meaning of the statement in *Categories*, Ch. 5. Furthermore, the *opposition* between positive and negative differences rooted in the same perfection is, strictly, an opposition that Aristotle and Aquinas should use the word "negation" in describing, not "privation." With respect to the substantial form signified by the positive difference as being possessed by the higher species, the lower species is in a state of negation, whereas the genus is in a state of privation. Upon this distinction between privation and negation, as diverse opposites of possession, rests the metaphysical significance of the virtual presence of the inferior substantial form in the common matter signified by the genus and its actual presence in the lower species as signified by the addition of the negative difference to that genus. See fn. 18 *infra*. It would seem from all this that neither Aristotle nor Aquinas had a clear or adequate understanding of the principle of hierarchy, though both seem to affirm it.

¹⁷ This is the case of the division of the highest genus, for only in this case does essential differentiation result in the definition of two species. In all other cases, the division results in the definition of a genus, on the one hand, and a species, on the other. See fn. 9^a and 10 *supra*. In these other cases, the genus is defined by the positive difference, the species by the negative difference. Hence the argument by *reductio ad impossibile* is more complicated in these cases than in the case of the highest genus as divided into two species. Though more difficult to apply, the principle of the argument remains the same for all cases of essential differentiation.

form represents an actual determination of being, that is, a perfection, we can ask which of the two relations between diverse perfections obtains here. Is the substantial form involved in the common matter signified by the genus, related by contrariety or cumulation to the substantial forms signified by the differences?

We know at once that it cannot be by contrariety, for then the union of common matter and substantial form to constitute the definable essence of each species would involve a union of contraries, which is impossible. Let us take the other alternative and suppose the substantial form involved in the signification of the genus to be accumulated by each of the two substantial forms signified by the differences. But how are these two substantial forms related to each other? They cannot be related by cumulation, for then the two species could not be differentiated by their diversity. Nor can they be related by contrariety for then one and the same substantial form (the one involved in the signification of the genus) would be accumulated by each of two contraries. This is impossible because it would require the common matter to be in determinate potentiality to contrary forms. But only prime matter can be in potentiality to contrary forms, and that precisely because its potentiality is indeterminate.^{17a}

Hence if we begin with the supposition that the substantial form involved in the signification of the common matter by the genus is diverse from the substantial forms signified by the differences, we find that none of the consequent alternatives is possible. Hence their antecedent — the supposition with which we began — is impossible, and we are therefore forced

^{17a} It is not intrinsically impossible for contrary perfections to be cumulative of the same perfection. See fn. 9 *supra*. It is only impossible for this to be the case when the perfections in question are substantial rather than accidental forms; and this for the reason given in the text at this point.

It may be objected that another possibility remains to be considered and eliminated; namely, the possibility that the contrary perfections signified by the differences are coincident with the perfection signified by the genus. This is the other possibility mentioned in fn. 9. It is eliminated at once by the fact that the relation of coincidence is a contingent one and, therefore, cannot obtain between essential perfections.

to the other supposition, namely, that the substantial form involved in the signification of the genus is identical with the substantial form signified by one of the two differences, and must be related by cumulation, not contrariety, to the substantial form signified by the other.

This being so, we can see that the differentiation of essentially distinct kinds involves only two, not three, substantial forms (or essential perfections), and that it cannot involve two positive differences rooted in distinct perfections. *Therefore, essential differentiation must conform to the pattern of mode Beta, which is the point to be proved.*^{17b}

The steps that lead to this conclusion also contain answers to the questions about the ontological significance of the negative difference and the generic term in essential definitions. The substantial form that is involved in the signification of the genus is identical with the substantial form that is signified by the negative difference in the definition of one of the two species, let us call it species B. The positive difference in the definition of the other — species A — signifies a distinct substantial form, one which accumulates the substantial form that is involved in the signification of the genus and that also is signified by the negative difference in the definition of species B. To understand this we must understand how one and the same substantial form can be present in three distinct conditions, for it is somehow present in the common matter signified by the genus, it is identical with the substantial form signified by the negative difference, and it is co-present with, since it is accumulated by, the diverse substantial form signified by the positive difference.

Let us use X and Y to represent the two diverse substantial forms that constitute the whole essential difference between species A and B, and let X be the cumulative, and Y the accu-

^{17b} What has been proved is that essential differentiation cannot be by positive differentia rooted in contrary perfections, not that contrary perfections cannot be cumulative of the same perfection. Contrary perfections cumulative of the same perfection remains one of the two possibilities in differentiation according to mode Alpha, the other being the coincidence of each of two contrary perfections with a third perfection. See fn. 9 and 17^a *supra*. The nature of accidental forms does not preclude either possibility.

mulated form. We know, then, that X must be the form signified by the positive difference in the definition of species A, and Y must be the form signified not only by the genus A, but also by the negative difference in the definition of species B as well as by its genus.

Our question, therefore, is about the three distinct conditions of form Y. The answer briefly stated is as follows. Form Y is virtually present in the common matter signified by the genus, and its virtual presence causes the common matter to be determinately determinable in two ways, either to determination by the cumulative form X or to determination by the rejection of this form. Under form Y, the common matter is in a state of privation with respect to form X. It lacks form X, but, far from rejecting it, it is in potentiality to it; and this potentiality is actualized when the common matter, determined by the virtual presence of form Y, is united with and further determined by the actual presence of form X. It must also be possible for form Y to be actually, as opposed to virtually, present in matter, but when it is so present, it must exclude or reject form X, since two substantial forms, even through related cumulatively, cannot be actually co-present in the same matter. When they are co-present, as in species A, the cumulative form is actually present and the accumulated form is present only as virtually included. Hence species B is constituted by the actual presence of substantial form Y, species A by the actual presence of substantial form X, and the genus common to both by the *merely virtual* presence of form Y, the accumulated form which either can be actual by itself to constitute the essential difference of the lower of the two species, or can be virtually included by form X, the actual presence of which constitutes the essential difference of the higher species.¹⁸

¹⁸ The virtual presence of a substantial form in the common matter means a twofold privation: the privation of its own actuality, which is realized in the lower of the two species; and the privation of the cumulative form to which it puts the common matter in a state of potentiality, that potentiality being actualized when the common matter is united with the cumulative form in the higher species. In contrast, the actual presence of the accumulated form in the lower species means a state of negation, not privation, i.e., the removal from the matter so formed of any potentiality to the cumulative form. In the division of the genus *animal* into the species

This concludes a sketch of the argument for the hypothetical proposition that *if there are essentially distinct kinds, they must be ordered hierarchically*, accompanied by some indication of the solution of difficulties arising from a theory of essential differentiation as always involving only two distinct perfections, and a positive and a negative difference rooted in one of these. I am fully aware how sketchy the sketch is and how bare the indication. But I hope I have at least made clear what is involved in affirming or denying the hierarchy of essences, both the metaphysical principles that are indispensable elements in the argument and the logical formulations that are correlative to them.

IV

In the concluding section of this paper I wish briefly to mention certain consequences for the logic of definition and induction that would follow if the whole theory of the hierarchy of essences is true. The fact that I connect definition and induction indicates that I am here concerned with induction only so far as it is a process of inferring from observable particulars generalizations about natural kinds.

The kinds may be either essential or accidental, and the generalizations may be either necessary and certain or contingent and probable, but in either case induction with respect to kinds can be viewed as a process of concluding from instances or particular evidences that a nominal definition is real or, in other words, that the kind for which a definition can be notionally or verbally formulated really exists.

If the whole theory of the hierarchy of essences is true, it controls the discovery of natural kinds, both accidental and essential, but it has striking and novel consequences only for

brute and *man*, the negation of the substantial form that constitutes the higher species is usually expressed by the word "irrational." We should, therefore, use a distinct word, such as "*non-rational*" to express the two-fold privation in the genus *animal*, which is neither actually rational nor actually irrational, for it signifies a nature that is capable of being either.

For some discussion of the metaphysical conception of *virtual presence*, see Aquinas, *Summa Theologica*, Part I, Q. 76, AA. 3-4; and also my "Solution of the Problem of Species" (*loc. cit.*, pp. 357-9).

the discovery of definable essences, i.e., specific natures or natural kinds that differ essentially.

So far as accidental natural kinds are concerned, if any exist (as would appear to be the case from the taxonomic empirical sciences), the inductive principle is derived from the character of accidental differentiation and definition. Since differentiation according to mode Alpha involves positive differences rooted in contrary perfections, and since each of these positive differences is conjoined with a generic term signifying a distinct perfection, the evidence for an accidental natural kind would consist, in the simplest case, of instances which show a constant conjunction of two traits, combined with instances in which the contrary of one of these traits is conjoined with the trait that appears to be generic.

Such simple accidental definitions represent a large part of the natural kinds that are signified by the common nouns in most languages; they are accepted as real in the light of common experience without the articulation of an inductive process. They present no problem for scientific inquiry.

In their taxonomic inquiries, the empirical sciences deal, for the most part, with more complex cases in which the accidental definition, to be tested or established inductively, consists not of one generic term and one positive difference, but of a genus combined with a number of positive differences which are supposed to signify inseparable traits.¹⁰ The problem is not whether the trait signified by the genus is always accompanied by the traits signified by the set of differences, but whether when it is accompanied by one of them, it is also accompanied by the others that are proposed by the definition as being co-present. Only if they are co-present is the proposed definition inductively established.

Mill's methods of agreement and difference, in one version or another, provide the rules for such inductions, since the accidental definition in question asserts that in a certain natural class of things there is a natural sub-class constituted by a

¹⁰ See "Solution of the Problem of Species" (*loc. cit.*, pp. 366-368, and esp. fn. 122).

number of inseparable traits. This being so, it is not necessary to establish or even to formulate the definitions of all the other sub-classes in order to formulate and establish the definition of a particular sub-class. Furthermore, since each sub-class is determined by positive differences each signifying the possession of a distinct trait, there need not be *only two* sub-classes within a given class. In the accidental order, a genus can have more than two species, the differentiating traits of each being as a *set* contrary to the sets of differentiating traits in all the others.

Now if we turn from the accidental order to the realm of essences or essential kinds, we find a totally different situation. Since essential differentiation involves positive and negative differences rooted in the same perfection, there can never be more than two essential species in a single genus, and the definition of one can neither be formulated nor established separately from the definition of the other. Considering for the moment only the case of the two essential kinds that divide a single genus, the inductive procedure by which the formulated definitions can be established must involve instances that differentiate one species from another. To do this, the instances must provide evidence of a hierarchical relation between the traits or perfections possessed by one sub-class of things and those possessed by another, the two groups being accepted as belonging to the same generic class. In short, in the realm of essential kinds, the specifying signs must also hierarchize or be signs of hierarchy.

But that is not all. Since in the hierarchy of definable essences, only the definition of the highest is constituted by a positive difference signifying a perfection that is specific; since in all essential differentiations except the one that divides the highest genus into two species, the positive difference always signifies a perfection that is generic and the negative difference that same perfection as specific; and since all the perfections of inferior species, being also generic, are possessed by the highest species in addition to its own specific perfection, it follows, *first*, that it is impossible to formulate and establish the definition of any species in the hierarchy of essences without

formulating and establishing the whole hierarchy; and second, that the highest species is the first principle of the whole hierarchy, not in its being, but in its being known.²⁰

I shall not enter here into the argument which, I think, is able to show both that and why man is the highest species of material substance; and also why, if that is so, there cannot be more than four other essential species in the hierarchy, though there may be less. I wish only to point out that we cannot know the definition of man's essence without thereby knowing all other essential definitions, and that we cannot inductively establish any of these definitions without establishing all.

If the whole theory of the hierarchy of definable essences is true, and if these are its consequences for our definition and knowledge of essential and accidental kinds, the problem of induction with respect to natural kinds is strikingly different when the kinds in question are essential and when they are accidental. However difficult it may be in particular cases, the inductive problem is clearly easier in the realm of accidental kinds. And it seems appropriate that it should be so; for if the empirical sciences of nature are restricted by their methods to the discovery of accidental kinds, whereas only a philosophical science of nature is adapted to knowing essential kinds, it is right that the solution of the easier problem should result in conclusions that are contingent and probable at best, whereas

²⁰ In the hierarchy of numbers or regular plane figures, the number one and the triangle are the starting points and the generative principles of the series. These series develop by the successive addition of like units or differences, and they can expand infinitely. In the finite hierarchy of definable essences, the highest species is not only the limiting point, but also the summation of the whole series of essential perfections, all of which are implicit in the definition of the highest species. The lower species are defined by the subtraction (*i.e.*, negation) of one or more of these essential perfections, and the lower limit is reached when all but one has been negated. The fact that the highest species is the *causa cognoscendi* of the whole hierarchy of essences may explain why the metaphysical argument for the principle of hierarchy is most easily stated in the case of the division of the highest genus into two species, the highest and its proximate inferior. Cf. fn. 16a *supra*.

in the other case we should either reach no solution at all or achieve one that is necessary and certain.

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DECISION AND EXISTENCE

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Perhaps the best way to appreciate a philosophical insight is to try to do without it or to consider a system of thought in which it is slighted or ignored. Thus existentialism in its several phases, whether in its neo-romantic form as presented by Sartre, or in its neo-scholastic form as interpreted by Gilson and Maritain, may profit by contrast with other modes of thinking which have failed to apprehend the true quality of existence. For this reason, Leibniz' philosophy, or at any rate his theology with its plurality of possible worlds, should fascinate the student of existentialism. This is especially true since the extreme "essentialism" of Leibniz' theology stands, as we shall see, in contrast with his keen sense of the individual and the spontaneous. However, in the world-situation presented by the theological Leibniz, we may well demand, what meaning can be attributed to "existence"? How do we describe the privileged status of the chosen "best of all possible worlds" and its creaturely inhabitants? The fact that so many readers of Leibniz, even when repudiating his theodicy, notice no special difficulty here indicates how easily the attitude and insight of the existentialist can be overlooked. In this way, we may come to recognize the radical nature of this insight, which may be expected profoundly to transform our thinking once it has been noticed. Let us consider the problem at length.

It may be helpful to recall that here as elsewhere Leibniz' pluralism finds a complementary counterpart in Spinoza's monism. Spinoza never deserted the notion of a single world-system wherein existence exhausts all possibility, so that, *sub specie aeternitatis*, the two are the same.

To those who ask why God did not so create all men, that they should be governed by reason alone, I give no answer but this: Because opportunity was not lacking to him for the creation of every degree of perfection from highest to lowest; or more strictly, because the laws of his nature are so vast as to suffice for the production of everything that may be conceived by an infinite intelligence.¹

¹ *Ethics*, Book I, appendix. Italics added.

For Leibniz, on the other hand, the actual world is a selection from the total realm of conceivable possibility so that the two are thought of as ultimately distinct. By far the major section of possibility is denied existence. Creation rejects as well as realizes and rejects more than it realizes. Creation involves rejection based upon the divine approval and selection of one system as more choiceworthy than any other, because it possesses the maximum of essence or of unity and variety — shall we say, the maximum of macrocosmic integration and microcosmic differentiation — throughout its structure and detail. It is thus the most interesting and satisfying world that God, in his wisdom and goodness, contemplates. This chosen world and this one alone is granted existence.

Leibniz distinguishes between God's choice or nomination of the best of all possible worlds and the *fiat* whereby this world is projected into existence. The first is called an *antecedent*, the second, a *consequent* or *decretory* will. One way of stating our problem is to ask just what is the function of the decretory will? Leibniz, to be sure, insists upon the supreme importance of this act of will. He assumes (*Monad.* 53) that only one world can be actual, and that if no one world stood out as the best, there would be no creation (*Theod.* 8).

But the question remains: Just what does Leibniz' God give the chosen world when he grants it existence? Just what does he withhold from the alternatives? What finish or polish is added to the choiceworthy structure of "compossibility" to constitute it an existential order?² I had this problem brought home to me some years ago by a clever student who unintentionally outdid Voltaire in his effort to embarrass Dr. Pangloss. "How do we know," he asked, "that this particular world-system of ours, including such things as the Lisbon earthquake, the slave trade and all that man has done and wanted to do to man — how do we know that this world-system is not one of the rejected alternatives? Surely God has denied existence to so shabby and unworthy a design? Surely *we* are not only possibilities to whom it would be an act of cosmic perversity to grant existence? As rejected candidates for existence, we may be thought to parody and caricature the true creation, which

² Cf. J. Maritain, *Existence and the Existent*, p. 65.

as the best of all possible worlds must far surpass our sorry lot."

I have always admired my student's ingenious *tour de force*. By such strategy the problem of evil is dismissed, even though "our world" is dismissed with it. And what a happy way to revive Descartes' conscientious doubts! No malignant demon is needed to deceive us now. God himself maintains a world-situation in which our non-existence is perfectly thinkable and very probable. Once we have questioned the existence of ourselves and our world, can we summon the arrogance to argue that God could not conceive a nobler world than ours to create? Unless we do, we cannot claim our existence with confidence. And if we do claim to exist, we hardly know what we are claiming.

Mention of Descartes calls to mind my first efforts to refute my ingenious student. Naturally enough, I invoked a line of argument based on the *cogito, ergo sum*. Sheer possibilities, I objected, could not be conscious of themselves even as possibilities. We do not suffer from possible, but from actual doubts. He and I, I assured him, were more than possibilities. But there my opponent stood his ground and quoted Leibniz to good effect. We might not, he said, expect abstract or schematic possibilities to be clothed, so to speak, in consciousness and feeling. But let us repeat that Leibniz' possible worlds are not outlines, sketches, or blue prints. Each is a fully constructed system of compossibility, exhaustively concrete in precise detail, and each individual "inhabitant" of such a world shares in its concrete texture. In support of this let us examine two passages. Consider the following sentence from *Discourse on Metaphysics* (section XIII):

We have said that the concept of an individual substance includes once for all everything which can ever happen to it and that in considering this concept one will be able to see everything which can truly be said concerning the individual, just as we are able to see in the nature of a circle all the properties which can be derived from it.

Also the oft-quoted letter to Hessen-Rheinfels in which Leibniz considers manifold possibility with reference to the career of a single human being, here symbolized by the Biblical Adam:

...by the individual concept, Adam, I mean, of course, a *perfect representation of a particular Adam* who has certain individual characteristics and is thus distinguished from an *infinity of possible persons* very similar to him yet for all that different from him (as ellipses always differ from the circle, however closely they may approach it). God has preferred him to these others because it has pleased God to *choose precisely such an arrangement of the universe*, and everything which is a consequence of this resolution is necessary, only by a hypothetical necessity and by no means destroys the freedom of God nor that of the created spirits. There is a possible Adam whose posterity is of a certain sort, and an infinity of other possible Adams whose posterity would be otherwise; now is it not true that these possible Adams (if we may speak of them thus) differ among themselves and that God has chosen only one who is precisely ours? There are so many reasons which prove the impossibility, not to say the absurdity and even the impiety of the contrary view, that I believe all men are really of the same opinion when they think over a little what they are saying.³

At this point, although I perforce abandoned my first objection, I was able to overreach my ingenious opponent by carrying his argument somewhat further than he had anticipated. I insisted that if we meditate as Leibniz suggests upon the above quotation, increasing difficulties will appear from another quarter. We may perhaps grant that Leibniz, in opposition to Arnaud, defends with verbal facility the "spontaneous freedom" of the *chosen* Adam, or the *chosen* Judas, who once being admitted to existence, proceeds to be himself just as God intends that he should. But, at this stage in our argument, the interesting point is simply that each possible Adam carries with him a complete family tree and a biography with its place in history, complete without *lacunae*, all of which must be, if this Adams is elected, admitted to existence as a whole. This is true of each and every possible Adam. And yet, only *one* Adam is fully real — only *one* has enjoyed existence. It is, according to Leibniz, absurd and impious to doubt this proposition. However, as we consider the metaphysical situation which Leibniz has accepted, the proposition appears increasingly untenable. After all, how can we *exclude* a possible Adam from existence? For what meaning can we attach to existence beyond concrete compossibility? And every possible Adam

³ Leibniz to Count Ernest Hessen-Rheinfels, April 16, 1696, Montgomery's trans. Italics added.

exhibits this, since he belongs to a possible world.

Let us turn in illustration to the *Theodicy*, using Gentile's resume, where the priest Theodore is being instructed by the Goddess of Wisdom. Theodore is shown a cross section of many possible worlds as he examines the metaphysical dossier of the notorious Sextus Tarquin. Leibniz is again concerned with the question of freedom. Sextus has not been coerced, although one of the less admirable versions of his life has been admitted to existence. This version is chosen as a step toward establishing the Roman Empire of which both God and Leibniz approve. In the palace of the Fates there . . .

... is portrayed not only all that happens, but all that is possible, and he is able to see every particular which would have to be realized together with and in the system of all the other particulars in its own quite special possible world. "Thou art aware," says Pallas to Theodore, "that when the conditions of a point which is in question are not sufficiently determined and there is an infinity of them, they all fall into what geometricians call a locus, and at least this locus (which is often a line) is determined. So it is possible to represent a regulated series of worlds all of which will contain the case in point and will vary its circumstances and consequences." And all these worlds existing in idea were exactly pictured in the palace of the Fates. In each apartment a world is revealed to the eyes of Theodore; in each of these worlds he always finds Sextus: always the same Sextus, and yet different in relation to the world to which he belongs. From world to world, that is from room to room, Theodore rises ever towards the apex of a great pyramid. The worlds become ever more beautiful . . . They enter, Theodore overcome with ecstasy, into the highest apartment, which is that of the real world. And Pallas says, "Behold Sextus such as he is and as he will in fact be. Look how he goes forth from the temple consumed with rage, how he despises the counsel of the Gods. See him going to Rome, putting all in disorder, ravishing his friend's wife. See him then driven out with his father, broken, wretched. If Jupiter had put here a Sextus happy at Corinth, or a King in Thrace, it would no longer be this world. And yet, he could not but choose this world which surpasses in perfection all the others and is the apex of the pyramid; otherwise Jove would have renounced his own wisdom, he would have banished me who am his child. You see, then, that it is not my father who has made Sextus wicked; he was wicked from all eternity and he was always freely so. Jove has done nothing but grant to Sextus the existence which divine wisdom could not deny to the world in which he is comprised. He has made this world pass from the realm of the possibles to that of actual being."⁴

Perhaps we may take for granted that the world-system displayed at the apex of the pyramid is, viewed as a whole, more satisfying esthetically and morally than any of the others. But all these systems are *mondes complets* or *bien faits*. After all, their concrete consistency is guaranteed by the God who conceives them. After listening to Leibniz' account of the rooms in the palace of Fate, we may feel that the detail of each seems as genuine and as real, if not as excellent, as that of any other. Thus, since chosen and rejected worlds are so alike in logical form, suppose we say that they *all* exist — that divine choice merely awards a badge of honor to the best rather than denying the existence of the alternatives. Thus, *all* the Adams, *all* the Judas, *all* the Sextus, enjoy reality. Not, to be sure, in one concrete setting, but so to speak, concurrently in isolation from each other, each within his own proper system. This would seem to bring us back — but with an obvious and significant difference — to the position of Spinoza quoted above: all things possible to a divine intellect come to be, and all the changes are rung, so to speak, simultaneously. For Leibniz, this would involve infinite variations upon each particular and concrete history, i.e., upon each individual; for Spinoza, more simply, variations upon types and patterns to be created.⁵ Some

⁴ *Theod.* 414, as rendered by G. Gentile, *Theory of Mind as Pure Act*, Wildon Carr's trans., London 1922, pp. 190-191.

⁵ That there should be "several me's" is a strangely distasteful suggestion — even as Leibniz felt, ridiculous and impious. Our sense of personal existence is violated by the suggestion. We think of ourselves as somehow partially built up by our own decisions, and a personality remote from these decisions has no claim upon us. It is not even our "opposite number" or corresponding member. Thus, when Leibniz grants full concrete texture to our "other selves" he risks violating our sense of personal existence and decisive autonomy, even though he will not use the word *existence* of these other personalities.

(Let me add that the idea of Leibnizian infinity with all its member systems fully existent has been recently exploited in a shrewd and amusing way by a skillful writer of fiction, Mr. Frederick Brown, a metaphysical Jules Verne, in a novel suitably entitled, *What Mad Universe*. In this story, the hero is, by a metaphysical miracle, projected from one alternative world-system to another, thus surpassing the adventures of Henry James' hero who succeeded only in moving to and from on the time dimension of a single world-system.)

such idea seems indeed to have occurred to Leibniz for in *Theodicy* 8 he writes as follows:

...if there were not among the possible worlds one that stands out as the best, God would produce none of them. By world, I mean the entire sequence and collection (*toute la suite et toute la collection*) of all existing things, so that we may not say that several worlds can exist in different times and different places. For it would (still) be necessary to count them all together as one world, or, if you will, as one universe. Moreover, when one fills all times and all places, it remains always true that one may do so in an infinity of ways, of which God must choose the best, since he does nothing without acting according to an ultimate reason.

Here Leibniz dismisses this line of thought with undue haste and in a manner hardly consistent with his total philosophy. We need not consider alternative worlds as being spatially or temporally related to one another. Certainly Leibniz of all people cannot think of God as filling an absolute space and time with created content. If there are alternative systems of existence, each has its own space and time (perhaps we should add to-day even its own geometry) and these spaces and times are not continuous or "in contact" with one another.

Thus Leibniz' parsimonious treatment of existence invites some most unwelcome developments in his doctrine. Perhaps *all* the possible worlds exist. Then again perhaps *none* exist except as fully documented plans in the divine intelligence, which alone can claim existence in its own right. Furthermore, even if we argue that *one* of the possible worlds must exist, we are unable to characterize such existence or to be sure that "our" world exhibits it. The theology of world-choice seems existentially bankrupt.⁶

⁶ See F. E. England, *Kant's Conception of God*, New York 1930, pp. 46 ff. Eighteenth century rationalist thought, developing subject to Leibniz' influence, failed to rescue the notion of existence from its status as a neglected step-child. To be sure, Wolff and Baumgarten reworked the Leibnizian concepts. But their criticism was not decisive and was offset by Kant's emphatic refusal to enrich the notion of existence or to curtail that of possibility.

There are a number of concepts which we might expect some thinkers to offer Leibniz in his predicament, concepts such as Peirce's "thirdness" — spatial and temporal systems of location,⁷ of presence of sense data or of matter, of consciousness or apperception and so on — but none of these concepts will help us at this juncture since each of them may be thought to appear in many world-systems to which the God of Leibniz has denied existence. Indeed, I do not believe that a solution can

In his *Beweisgrund* of 1763, Kant briefly considered and sharply criticized the statements of Wolff and Baumgarten concerning existence and possibility. In both these writers, there seem to be a certain indecisive dissatisfaction with Leibniz' thought on this point, but as F. E. England has indicated, there was at this period "no clear conception of the radical difference between the connection of compatible predicates in a possible subject and the connection of real predicates in an actual subject." According to Wolff, since possibility is not sufficient to support existence, the latter must be regarded as a *complementum possibilitatis*. In other words, existence must be *added* to possibility, which is in itself merely that which involves no contradictions. Wolff seems to have been uneasy about this definition. At any rate, he preferred to consider it as merely a nominal one. Kant considered Wolff's treatment of the subject "obviously very incomplete." Baumgarten tried to draw the line more sharply by arguing that the actual is characterized by a "complete inner determination," a determination in which merely possible things are lacking. Kant objected that both possibility and existence must be fully determinate. Indetermination, which Kant failed to relate to the idea of the determinable, is a mark of the impossible and thus cannot apply either to possibility or existence, but only to our incomplete comprehension of them. Thus, Kant declares that any man whose specifications do not include a definite stature, or refer to a given period with definite dates and location, etc., is "impossible." Again in the *K dr V*, (A234 = B287) Kant writes, "Through the actuality of a thing I certainly posit more than the possibility of it, but *not in the thing*. For it can never contain more in its actuality than is contained in its complete possibility." Here as in Leibniz, "complete possibility" exhausts the detail of its corresponding existence. (See my "Time and Possibility in Kant," in Whitney and Bowers, *The Heritage of Kant*, Princeton, 1939, p. 98.)

⁷ Kant's contemporary, Crusius, tried to draw a distinction between possibility and existence by insisting that an existing thing must display a *somewhere* and a *somewhen*, thus inviting Kant's picturesque criticism, reminding us of his treatment of the ontological argument, that Ahasuerus, the wandering Jew, whose very essence involves his passing through all countries and all periods, is still without doubt *merely* a "possible" human being.

be found ready-made in Leibnizian philosophy. It may be wiser to say that the very quality of existence has been overlooked by Leibniz, and that, if we continue to ask our question in the form that his scheme of thought invites, we can have no answer. We might suggest that Leibniz, in overlooking the existential aspect of life, has presented us with the most extreme form of "essentialism" in the history of western philosophy.

But on second thought, we may feel that Leibniz is not to be dismissed quite so easily, even by a polemical existentialist. After all, his total thought contains much that his theodicy conceals. Thus, his physics may be more helpful than his theology. Let us recall that he repudiated the Cartesian identification of physical matter with extension or mathematical form. Thus, he might be inclined to resist the identification of existence with essence or possibility — or perhaps we had better say that he would be inclined to see more in existence than even the most intricate form. In this connection, Leibniz comes nearest to hitting upon a satisfactory distinction when in the *Principles of Nature and of Grace*, he writes, "All Nature is a plenum. There are simple substances everywhere, which are actually separated from one another by activities of their own, and which continually change their relations." Substance has been defined as a "being capable of action," springing from an "internal principle." Latta comments as follows: "The idea is that each monad is separated from every other inasmuch as it has spontaneity, i.e., an activity entirely its own; for if it had an activity like motion, which passes from one thing to another indifferently, it would be united with all other monads in a continuum and would thus cease to be a real independent unit."⁸

Now, if in Leibniz' system such self-distinguishing activity could be predicated only of *existing* monads, so that it might be said to distinguish them from *possible* monads, then we would have a way out of our embarrassment. Leibniz, it is true, does not employ the notion in this way. Some degree of spontaneity would seem to be recognized in the concept of *any*

⁸ *Principles of Nature and of Grace*, Section III, Latta's trans., with comment, R. Latta, *Leibniz, the Monadology and other Philosophical Writings*.

possible monad, certainly in that of each alternative Adam. It is true also that Leibniz at times recognizes a sort of self-assertion proper to possibility which somehow demands existence (*Monad*, 54). There can be no question that spontaneity and freedom fall on both sides of Leibniz' world order — belonging both to the existing and to the possible.

But let us return to Leibniz' single substances as they separate themselves from one another by activity of their own. As Latta has pointed out they thus separate themselves from their neighbors and maintain a status distinct from that of drops of water in the ocean. Let us here step beyond Leibniz, yet following his intention in the light of more recent thought. This separation, we may argue, should cut deeper. It should be metaphysical as well as physical. These substances must separate themselves from the *possibilities* which they reject as they make their way in the world. If we are to comprehend the activity of a monad, so conceived, we must recognize that the monad is itself in touch with many possible worlds or with isolated sections of them. Existence is the *interplay* of actuality and possibility, an interplay which Leibniz' segregation of actual and possible worlds renders insignificant. Thus, no actual monad is *enclosed* in a single given system or continuity of world history including a future. Like Leibniz' God, each finite monad is in contact with real possibility. As a finite being, he faces an undetermined but determinable future.

To *exist* is to have an unfinished history and a problematic future, the two being united in decision. Our future is still in the making, and we are separating ourselves from a manifold of possibilities: "Separating out from the boundless," as Anaximander might have said, and identifying ourselves with our intentions as they take shape. Such activity is what we mean by existence. It is an activity of selective realization. Perhaps we should call it creative. Consider the young man who has completed his more general education and who now undertakes to choose and enter upon a career. Here is a symbol of existence. To exist means to stand upon a realized past facing a sea of futurity, to breathe like an amphibian the atmosphere of determinate past and undetermined future, to move constantly to and fro between actual and possible. There is for each of us

a given actuality, namely our past, and we are all involved in it deeply. For each of us there are many possible futures, "lives," "roles" or "characters," lacking in the dense, close-knit concretion of the past. Existence is the compresence of the two orders. Conscious choice is the fullness of existence, in which past and future are *present* to one another in the freedom of self-determination.

Thus, Plato's myth of Er applies to our everyday mundane existence. We need not think of our acts of self-determination as taking place in heaven between our mundane incarnations. Indeed, without such self-determination characterizing our temporal existence, we would not be "incarnate" at all, but only an item of compossibility in a Leibnizian possible world. We should write *opto* rather than *cogito, ergo sum*; our sense of existence as distinct from essence or possibility is included in our self-consciousness as agents of decision. Such awareness or, as S. Alexander would have it, "enjoyment" of our own subjectivity is an intuitive prelude to philosophical theory. It is certainly not the result of any dialectical argument, however subtle. It is, however, pre-rational rather than irrational in status. Thus, so acute a student of scholasticism as M. Jacques Maritain is willing to argue that an intuition of our own subjectivity affords an indispensable preface to human wisdom. He argues that our sense of subjectivity may be justified in Thomistic terms.

Subjectivity is not known, it is felt as a propitious and enveloping night. There is, secondly, a knowledge of subjectivity as such, imperfect and fragmentary of course, but in this instance formed and actually given to the mind, and which is thrown into relief by what St. Thomas calls knowledge by mode of inclination, sympathy, or connaturality, not by mode of knowledge.⁹

Maritain believes, however, that only in religious consciousness is our sense of subjectivity given fully adequate expression, where it is supported by a way of life and of thought that recognizes human personality, not strictly as an object, but in the inter-subjective relations of respect and love.

If it is to support a significant assertion of existence, our sense of active subjectivity must appear to us as free, i.e. as

⁹ J. Maritain, *Existence and the Existent*, pp. 70-71.

manifest in a self-determining decision, which as such is *causa sui* and not *ab extra* committed to this or that alternative. Otherwise, we could not discern in our subjectivity a distinction between the possible and the actual. We would then be aware only of a system of actuality comprising a determinate past, present, and future, their detail largely beyond our ken, yet recognized as including our own subjectivity as a series of events. But our existential freedom is incompatible with a fully determinate future. The future relevant to our self-determination must in some measure be unsettled and, so to speak, perforated with open determinability, the shifting void in which volition moves. This void or field of our decision is grounded or limited by realized actuality, yet it is still open to determination. It is the theater of our concern, practical and moral. As such, however, it need not be interpreted as something intrinsically dreadful, nor need our position with reference to it be considered as a desperate predicament. Indetermination may, indeed, offer an exhilarating prospect and be joyfully accepted, as by William James and even by Bergson. Thus, many European existentialists shudder at what has delighted other thinkers. Herein, lies a fascinating problem of contrasts in *Geistesgeschichte*. Existentialism, like Christianity itself, is capable of many moods.

So conceived, the world-order, of which there is happily but one, may be described as a pluralistic or many-centered universe, subject to no single act of determination comparable to that of Leibniz' God. Such an existential order is infinitely richer at each moment of its life than any Leibnizian system of compossibility, route or locus of events. For at every moment of creaturely decision a world of concrete realization is brought into contact with manifold possibility. The excluded alternatives still qualify and characterize the decisive events — and our history is so much the richer. Existence is colored by the possibilities which it has rejected. The actual world, with its many centers of decisive action, carries with it an infinity of unrealized possibilities, present as such and contributing to the value of the whole, so that our histories read in retrospect as a series of decisions not as strings of events. These decisions retain, even when considered in historical retrospect,

their status as prehensions of possibility. They are moments of becoming and not terms in a series.¹⁰

Bergson has clearly seen the relevance of the rejected and he has exploited it in his ingenious theory of the poetic imagination at work in tragic drama:

How, indeed, could the same man have been Macbeth, Hamlet, Othello, King Lear, and many others? But then a distinction should perhaps here be made between the personality *we have* and all those we might have had. *Our character is the result of a choice that is continually being renewed.* There are points — at all events there seem to be — all along the way, where we may branch off, and we perceive many possible directions though we are unable to take more than one. To retrace one's steps, and follow to the end the faintly distinguishable directions, appears to be the essential element in poetic imagination... *Poetic imagination is but a fuller view of reality.* If the characters created by a poet give us the impression of life, it is only because they are the poet himself — a multiplication or division of the poet — the poet plumbing the depths of his own nature in so powerful an effort to inner observation that he lays hold of the potential in the real, and takes up what nature has left as a mere outline or sketch in his soul in order to make of it a finished work of art.¹¹

In such a world as this which the tragic poet contemplates, human creatures are in contact with an indeterminate but determinable order of possibility and capable of decisive self-realization. Thus, human beings appear as full-bodied images of their creator, not mere shadows of his will like Leibniz' "spontaneous" Adam or Sextus, who "freely" live

¹⁰ Compare S. Kierkegaard: *Philosophical Fragments*, Swenson's trans., pp. 65-66:

Whoever apprehends the past, *historico-philosophus*, is therefore a prophet in retrospect. That he is a prophet expresses the fact that the certainty of the past is based upon an uncertainty, an uncertainty that exists for the past in precisely the same sense that it exists for the future, being rooted in the possibility (Leibniz and the possible worlds) out of which it could not *emerge* with necessity, *nam necessarium se upso prius sit, necesse est*. The historian thus again confronts the past, moved by the emotion which is the passionate sense for becoming: wonder.

Here Kierkegaard pays Leibniz too great a compliment. Historical events, including human decisions, are not "rooted" in the possible worlds. Rather we should say that for Leibniz each one of them is "contained" in an eternal system of compossibility and this is not what Kierkegaard means by "becoming."

¹¹ *Laughter*, trans. by Brereton and Rothwell. Italics added.

out the lives assigned them in deity's providential logistic. Their existence is their freedom. Here we need not turn to James, Bergson, or Sartre, for authority, but to recent utterances of neo-Scholastic writers who in developing the medieval notion of the "act of existence" have drawn Thomism and existentialism toward one another.

The radical newness of truly free acts, that fundamental character which Bergson has so remarkably brought to light in his analysis of free will, has its original source much less in duration itself than in the very act of existing, by which enduring things themselves endure. Things are not because they last; they last because they are, and, because they are, they act.¹²

Such action is the very substance of things — of a many-centered world ever in the making, a world whose quality is manifest in its negations and exclusions as well as in its concrete realizations.

Returning in conclusion to Leibniz, let us suggest that such a world of freedom and choice, in which creative freedom is, so to speak, incarnate, far surpasses any of the possible "worlds" or *loci* of the *Theodicy* in intrinsic excellence. Thus, we hardly conceive of God as willing to limit himself to so pedestrian a mode of self-expression as that described by Leibniz. After all, the best of all possible Gods would certainly not consider Leibniz' game of possible worlds worth the playing. He *could*, one may suppose, play such a game, but as the supreme existentialist, whose insight surpasses that of the great tragedians, we may assume that he would be bored with the result.

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¹² E. Gilson, *Being and Some Philosophers*, p. 83.

Here, the Thomistic "act of existence" appears as anticipating Bergson and the existentialists. Professor Gilson's dictum is consistent with some recent utterances of Professor Maritain. Maritain insists (*op. cit.*, pp. 116 ff.) that our free acts are unforeseeable and that there is no "scenario" of universal history in any sense prior to that history itself. Maritain uses as an example the slaying of Julius Cæsar at the hand of Brutus. His remarks should be compared with Leibniz' mention of Sextus Tarquin. In this connection, however, as also in Gilson's work, the relation of divine eternity to creaturely duration seems to me as yet obscure.



THE SHADOW OF THE ABSOLUTE

GUSTAV E. MUELLER

I

THE PHILOSOPHICAL ABSOLUTE AND THE GOD OF RELIGION

The idea of reality is not confined to the quantitative calculation of that fragment of the appearing world-process, which is the "nature" of physics; "islands of matter in a sea of emptiness"¹ — islands of physical abstractions in a sea of metaphysical ignorance.

All nations on this little planet earth, in all periods of their self-conscious history, are agreed on relating themselves back to an absolute world-ground which is also the goal of love; the source of existence is responded to in gratitude and awe. "Religio" literally means this "back-tie." Religion is the *consensus gentium*. The many world-religions appeal to the same Absolute in many linguistic symbols. We call a symbol which appeals to the Absolute a mythical expression. "Tao" or "Central Harmony" in Chinese Taoism or Confucianism, the "Trimurti" or "Brahma," "Vishnu" and "Shiva" in Hinduism, "Allah" in Islam, "Jehova" in Judaism, and "God Our Father" in Christianity are such mythical appellations. "The realm of God is primarily the invisible church, which comprehends all zones and different religions; secondarily the external church."²

Man, in saying "I am," expresses his finite existence. The Biblical God is referred to as saying "I am" to express His eternal existence. The finite "I am" reflects the eternal "I am." A being capable of expressing his existence in "I am" is called a spirit. The totality of all functions of the human soul are concentrated and involved in this "I am." Religion, hence, "offers the presentation (*Darstellung*) of the absolute spirit not only for perception (*Anschauung*) and imagination (*Vor-*

¹ L. Infeld, *Albert Einstein*, New York, 1950, p. 73.

² G. W. F. Hegel, *Sämmtliche Werke*, Stuttgart, 1927, vol. III, p. 226.

stellung), but also for thought and knowledge (*Erkenntniss*). The main function of religion consists in elevating the individual to the thought of God, to produce a unison with him and to give to the individual account of the certainty of such unison. Religion is the truth as it is found in all human beings."³

The philosophical idea of the absolute or unconditional Being to which I am related is identical with the truth of religious faiths. Truth is One and indivisible. This is frequently denied by theologians, who are practical advocates of their particular external church. They are, in such a case, less concerned with the truth of their religion than with the prestige and power of their particular myths in this world. The labyrinth of the history of the Christian dogmas in the West, bloody inquisitions and mass-persecutions are the sorry comment on the small and blind "faith" of exclusive churchmen and literal-minded theologians. "Faith," in the sense of assenting to something on hear-say, and "saving historical facts" or "saving dogmatic formulas" are artificial restrictions of religion; the touchiness of their addicts is proportionate to the artificiality of their beliefs.

Philosophy of religion is the moment of logical reflection within religion elucidating the universal meaning of faith. To exclude philosophy from religion is to exclude from religion the concern for its truth. The common theological charge against philosophy is that "philosophy is merely an abstraction from the sensuous world and therefore must terminate in a dead concept."⁴ Theologians who argue that way show that their own philosophical education has not passed beyond scientism. It is true that philosophy may start from the sensuous world, because visible nature also belongs to that which is. It is precisely the philosophical critique of scientism which alone expands our concept of reality, so that religion is known to be more than an edifying play with figures of speech, and the religious conception of reality becomes logically possible. "The rise above that which is sensuous and finite mediates negatively from our human side religious knowledge, in so

³ *Ibid.*, p. 225.

⁴ Walter Koehler, *Dogmengeschichte*, Zurich, 1943, p. 92.

far as the sensuous and finite is taken as a starting-point, but as one which is at the same time left behind and known in its negativity. This knowledge of the Absolute is at the same time absolute and immediate in itself; it can have nothing that is merely finite as its own positing ground... To know God is not above reason, reason is reflecting God (*Widerschein*), and is essentially the knowledge of the Absolute above a scientific intellect and its knowledge of the finite and the relative."⁵

The mythical language of religion colors the Absolute by images from different preferred realms of experience. The Eastern religions prefer the aesthetic perfection of the "lotus flower," in order to worship the eternal perfection of the absolute Being in all manifestations; they rise to this religious contemplation through the discovery of suffering and insufficiency of all earthly life. The Western, Biblical religions color the Absolute by preferring personal-moral purposiveness; they assure man of the eternal "love" and "mercy" of God in spite of man's moral incompetency.

The Absolute of philosophy is called "God" when it is affirmed in faith and worshipped in religious perspective. Theism emphasizes transcendence: the Absolute is wholly other than, is radically beyond and prior to, any finite and factual temporality. As eternal world-ground the Absolute is "the father," the "creator" of "heaven and earth," "omnipotent power." But the world-process also is. Pantheism or Polytheism worship God in his own "other," in the co-eternal "son"; his creation is not real outside or apart from Him, even though it is, as temporal process, not identical with Him. It is God's "goodness" to call and to maintain his creation in existence. It is his "love" to maintain his unity with his own creation. Goodness and love is his Holiness, revealed in and to the man who responds. In the Christian religion this self-revelation of God as human subject is visible and believed in Christ. Birth, suffering, and grave, is a moment in God's own eternal life. But this temporal suffering and moral incompetence of man is also cancelled and transcended. This is

⁵ Hegel, *op. cit.*, p. 97.

God's wisdom, setting measures, and justice, showing the ultimate unworthiness and insufficiency of all pseudo-absolute fixations of finitudes. Sin, consequently, is alienation from God, the declaration of independence on the part of man, who is vainly attempting to idolize himself or his own moral-practical designs. But the religious knowledge, that human and divine existence are not absolutely alienated from one another, but that man can grasp in God's "I am" his own ground, is religiously expressed as grace and reconciliation of man with God. This return of man to God is the "holy spirit" of religion.⁶

We now turn to the philosophical formulation of this human participation in the Absolute, having shown its harmony with religious symbolisms. Further discussion of this is found in my *Discourses on Religion* (Bookman).

II

ANALOGIA ENTIS

The idea of the absolute whole of reality is in itself absolute: It is not derived from something other than what it expresses. The idea of the unconditional Being is "first in dignity and power," as Plato says, although it may appear late in time. Philosophy could not seek reality, if it were not already aware of that which it seeks. We seek what we have half-forgotten, encumbered by experiential cares; philosophy is not wisdom, but "love of wisdom" and "reminiscence."

The Absolute is the unconditional whole and coincidence of all essential opposites; it is the dialectical unity of man and world, process and reality, temporality and eternity, freedom and necessity, affirmation and negation, one and many, being and becoming, transcendent and, in its own otherness, immanent.

It is unique and incomparable. All essential realms of experience, which can be compared and contrasted, can not be compared with the Absolute, which they all presuppose, but

⁶ *Ibid.*, p. 98.

which they do not define. The idea of the Absolute thus distinguishes itself from all concepts used in natural or cultural sciences. Every historical concept of individualities is also unique. As such the historical concept is an analogy to the uniqueness of the Absolute. Plato, therefore, compares the microcosmos of the human soul to the macrocosmos of world-organisms, but also points out that both are merely analogies to the Absolute, because they are not unique in the sense of being incomparable.

There is nothing "dead" in the Absolute. But the organism is only an analogy of the Absolute. It also is a living whole in which all parts are defined by this function in the whole, and the whole is defined as the totality of its functioning organs. But this too, like the historical individual, is an analogy only, because the universe has no environment, on which all organisms depend.

The universe is concrete. To think it requires a concrete idea as unity of opposites. The universe is the only concrete reality, and philosophy the only corresponding concrete "science." Understanding and transcending ourselves within its eternal being is a thinking of concrete reality inseparable from our fragmentary and transitory existence.

"Nearly all philosophers agree that opposites underlie the many beings and Being itself: for they say that all principles are opposites."⁷

Philosophical participation in the Absolute requires the recognition of abstractions as well as their reintegration in the whole of life. The philosophy of science, practice, art, and so on, considers an abstract but as such real distinction with reference to its contribution to the idea of the whole. The universe is the true measure of all partial and as such abstract truths. Philosophy, further, must recognize irrationality which is irrational with reference to limited systems of rational orders. The most superficial or momentary level of experience is linked to the whole no less than a deeper and more concrete level. Dialectical ontology is the foundation of dialectical anthropology.

⁷ Aristotle, *Metaphysics*, 1004^b.

III

THE ONTOLOGICAL ARGUMENT, ABSOLUTE IDEALISM
AND THE "FOOL"

We said the Absolute is world-ground, creation — and thus can create unity. The philosophical problem is, whether or how such a statement can be justified. Is it only a human, imaginative fiction or "idea" in my head? To say that the subjective-human idea of the Absolute is the Absolute itself is the standpoint of so-called "absolute idealism" or gnosticism. I am not sure whether anyone has held that view. If anyone does then that which Hegel calls the otherness of the world-process or the "seriousness of negativity" has gone. The idea of the Absolute is absolute itself; yes, but it is not *the* Absolute.

This confusion of the idea of the Absolute with the Absolute is traditionally known as the "ontological argument." It is usually stated like this: The idea of an absolute and perfect being implies the existence of that being, because it would neither be perfect nor absolute if it would lack existence. The existence of the absolute being is thus logically assured. The logical thought, my idea, implies existence.

This argument is ascribed to Anselm of Canterbury. Historians of philosophy are almost unanimous in this assertion. Already Anselm's contemporary, the monk Gaunilo, quotes the argument in that form and quite rightly replies that he could think a perfect island, whose perfection would imply its existence, since a non-existent island would indeed be far from perfect, but that such good logic does not guarantee the actual existence of such an island. Kant repeated the same "refutation" with the vulgar example; he could think 100 perfect dollars in his pocket, but he could not go and buy anything with them.

Now this is all very well and good — but it does not touch Anselm's ontological argument. The historians of philosophy should have quoted his text, instead of taking Gaunilo's or St. Thomas Aquinas' word for it. Anselm actually says the exact opposite of what his critics "quote" him as saying. Here are his own words:

And so, Lord, do thou, who dost give understanding to faith, give me, so far as thou knowest it to be profitable, to understand that thou art as we believe; and that thou art that which we believe. And, indeed, we believe that thou art a being than which nothing greater can be conceived. Or is there no such nature, since the fool hath said in his heart, there is no God? (Psalms xiv, L) But, at any rate, this very fool, when he hears of this being of which I speak — a being than which nothing greater can be conceived — understands what he hears, and what he understands is in his understanding; although he does not understand it to exist.

For, it is one thing for an object to be in the understanding, and another to understand that the object exists. When a painter first conceives of what he will afterwards perform, he has it in his understanding, but he does not yet understand it to be, because he has not yet performed it. But after he has made the painting, he both has it in his understanding, and he understands that it exists, because he has made it.

Hence, even the fool is convinced that something exists in the understanding, at least, than which nothing greater can be conceived. For, when he hears of this, he understands it. And whatever is understood, exists in the understanding. And assuredly that, than which nothing greater can be conceived, cannot exist in the understanding alone. For, suppose it exists in the understanding alone; then it can be conceived to exist in reality; which is greater.

Therefore, if that, than which nothing greater can be conceived, exists in the understanding alone, the very being, than which nothing greater can be conceived, is one, than which a greater can be conceived. But obviously this is impossible. Hence, there is no doubt that there exists a being, than which nothing greater can be conceived, and it exists both in the understanding and in reality.

God cannot be conceived not to exist. — God is that, than which nothing greater can be conceived. — That which can be conceived not to exist is not God.

And it assuredly exists so truly, that it cannot be conceived not to exist. For, it is possible to conceive of a being which cannot be conceived not to exist; and this is greater than one which can be conceived not to exist. Hence, if that, than which nothing greater can be conceived, can be conceived not to exist, it is not that, than which nothing greater can be conceived. But this is an irreconcilable contradiction. There is, then, so truly a being than which nothing greater can be conceived to exist, that it cannot even be conceived not to exist; and this being thou art, O Lord, our God.

So truly, therefore, dost thou exist, O Lord, my God, that thou cannot not be conceived not to exist; and rightly. For, if a mind would conceive of a being better than thee, the creature would rise above the Creator: and this is most absurd. And, indeed, whatever else

there is, except thee alone, can be conceived not to exist. To thee alone, therefore, it belongs to exist more truly than all other beings, and hence in a higher degree than all others. For, whatever else exists does not exist so truly, and hence in a less degree it belongs to it to exist. Why, then, has the fool said in his heart, there is no God (Psalms xiv, 1), since it is so evident, to a rational mind, that thou dost exist in the highest degree of all? Why, except that he is dull and a fool?⁸

What Anselm says, then, is this, that the Absolute exists, because the idea of the Absolute is *not* the Absolute itself. The Absolute reveals itself through the negativity, through the breakdown of any human effort to form an adequate conception. The only adequate conception is a *negative* conception, which declares that it is *not* that which it pretended to think, namely a "being greater than which *nothing* can be conceived." The human idea of the Absolute is transcending itself by *negating itself* as an absolute idea. The Absolute is that being which *cannot* be conceived to be identical with any human subjective notion in anybody's head. Its briefest notation is the paradox: *A is not A*.

This logic of the dialectical paradox is the logic of the Absolute. It is the shadow of the Absolute. The absolute Being is that which is *not* identical with any one of its many and opposite creations in which it appears as this ground. It is that which it is *not*. But dialectically it is also and likewise the negation of this negation, it is *not* outside and apart from the many transitive reflections and notions, which the creature forms of it. As Being in its absolute and fully concrete sense it exists precisely in those transitive processes, in whose breakdown and transitivity its absoluteness is revealed. It is not what becomes visible as its empirical or ideal manifestation, and it is not allowing them to stay in themselves as if they were absolute themselves. It negates this negation of itself and takes it back to itself.

The ontological argument says that the all-embracing, self-sufficient Absolute cannot be thought in any experience, but that no experience can exist without it. For this *dialectical* reason, the idea of the absolute is the only idea whose think-

⁸ St. Anselm, *Proslogium*, tr. by Sidney Norton Deane, Open Court, 1926, Chs. II and III, pp. 7, 8 and 9.

ing involves reality. If the Absolute Being "greater than which nothing can be conceived" were only an "idea in my head," it would not be the idea which we pretended to think and to understand, since an "idea in my head" is not that "Being greater than which nothing can be conceived." The idea of the Absolute *is not* the Absolute, it radically denies its perversion, which is the misunderstanding known as "Absolute Idealism," which conjures the Absolute out of its own idea of the Absolute.

To put it differently: Everything (whether worlds, or ideals, or negations) is something and not nothing. Their Being is different from their being this, that, and the other thing. However, their Being cannot be thought behind or separate from their being this or that. Every concrete determination, the "thisness" or "whatness" of any object or any idea is not Being. But since Being is not outside or apart from its manifestations, these manifestations must be thought as negations of Being, insofar as they are something and not nothing in addition to their Being. Or what they are "in addition" is also, it does not drop out of Being, although Being is not only "that." Or, Being "contains" its own negation, its other, its death and limitation within itself. It is One-And-Other; hence the formulation above, that my subjective understanding of Being involves its reality through the *negation* of my subjective, particular idea. If the Absolute is thought, it is more than mere thought. Since it is not given here or there or anywhere in particular, but since it is not thinkable apart from my particular realization of it, the Absolute is formulated as one with dialectical thinking. As unity of whatever is, it is also a unity of its own negations and of opposites within itself. The Absolute is a dialectical Being. Particular experiences, taken in and by themselves, are not Absolute Being, but apart from it they are nothing. Being cannot be thought to be a summation of nothings. The sum of negations is not Being.

Anselm's "fool" is as undialectical as the gnostic "absolute idealist." He is agnostic. He separates the idea of the Absolute from the Absolute. But the Absolute Being cannot be separated from the proposition which says what it is and what

it is not. Making the Absolute independent of the idea of the Absolute would reduce the idea to nothing. Being to which there is no legitimate access through thinking it, would be "a thing in itself," of which nothing could be predicated, not even that it is not experience. To separate is also to relate. The ontological argument thinks the Absolute negatively through the predicates that are excluded from it. It is in relation to that which it is not. It is not a perception, opinion, practical vehicle of communication; it is not any isolated system of experience; but again, it is not separate and apart from all these experiences. Being is the unity in and through what it is not; Being is itself and its own other; Being is the unity of Being and Non-Being.

The Absolute cannot be predicated of itself except in a negative dialectic. It is the link between a one and an other, which are united and differentiated. Their unity is Being, their distinction is Non-Being. Both belong together. Without distinction there is no unity; without unity there is no distinction, since distinction is also a unifying relation.

As unity of opposites, as synthesis of one and other, the Absolute can never become a dogmatic fixation, because the dialectical movement from position to position, the unfinality of all standpoints and fixations is the dialectical life of the Absolute. There can be no position which does not meet a challenge, and no question which does not in some sense demand a solution. The dialectic of one and other is present in all stages of experience.

The particular, one-sided negation of Being, such as evil, ugliness, and error, is as the other-than-God. Calling it illusion and unreality makes it not less real, but on the contrary magnifies its negative reality. If Non-Being were not, everything would be equally real and equally true and good. The unity and universal harmony of Being must be thought in and through all those realities, which in themselves are suffering from their very real insufficiency.

Non-Being, the disruptive other-than-Being is ontologically dependent on the affirmation. Every negation presupposes in the connecting "is" the priority of a unity, which is

broken up and which nevertheless maintains itself in its own disruption.

Being and Non-Being are always the one and inseparable Absolute. If we say that it is whole and part, one and many, eternal and temporal, same and different, absolute and relative, knowing and being known, and so on, we always characterize it by something other than it, but we also always take this otherness back, because whatever we say also is. The Absolute as unity of all opposites, of being and non-being, is a dialectical process, a dialectical becoming. And it shows or manifests itself to be this dialectical process in each of its steps, situations, achievements.

It is as impossible to separate God from the world as to identify the world with God. If we try to separate the undiluted one Being, we can do that only by saying what it is not, hence we characterize it negatively by the predications which we exclude; we thus draw it back into the living process of dialectic. If we try to separate the other, Non-Being, we must say that it is, which negates its negativity and fixes it back again in the dialectical process. Undialectical "absolute idealism" is just as impossible as empiristic agnosticism.

The ontological argument confronts you with the most radical Either/Or: Either you *think* absolute reality, and then you absolutely think *reality*, or you do not think reality at all — which does not prevent you from thinking stars, organisms, historical documents, or social problems.

Anselm's "fool" is in very numerous company nowadays. Among them we find all kinds of relativism, subjectivism, naturalism, positivism, nominalism, and the like. Their common counter-argument is that we cannot think Being, but only experiences. They identify thinking with the thinking of some given factual stuff; for them there is only a logic of scientific or empirical procedures, but no logic of philosophy. They deny Being, because they do not find it among their things or particular and general essences. They deny the ontological argument either by saying that it is a mere tautology, an empty generality, or on the contrary that Being must be some given stuff and that the ontological argument does not help us in "real" knowledge, by which they mean empirical knowledge.

But this opposition simply reaffirms the ontological argument from its negative side. Entrenched in the finite, subjective, and particular experience, those thinkers are unable to see anything except in isolation and abstraction. But that Being can not be thought behind, beyond, separate, or in abstraction from experience is precisely the thesis of the ontological argument.

Another form of the same opposition is the fictionalism of an "as if" or will-to-believe philosophy. Absolute Being is not to be thought, but you may believe that there is such a thing, if that edifies you. This "belief" itself, however, is something real. Unbeliefs are also real, as are all these experiences. They presuppose, therefore, the problem of Being, but Being does not presuppose their belief in order to be in and through them.

This leads us from the scientific-empirical to the moral-practical objection. The moralist is infuriated by the ontological dictum that "what is rational is also real." He knows that his moral experience of himself is not as it ought to be. He thinks the real being as an end to be brought about, as a purpose to be fulfilled. He, therefore, misunderstands the ontological dialectical rationality as rationalism. He overlooks the fact that the rational ontological argument contains the other, the negative and disruptive moment in Being. Moral experience with its tensions and problems is one of the many contradictory realms of experience, which are. Ontology cannot be replaced by "living a good life," or practising morality, because moral practice, the bringing about what ought to be, takes place in concrete situations, in responsible decisions here and now. Neither can ethics, the dialectic of moral standpoints, replace ontology, because ethics is the theoretical perspective of moral experience. Being is not to be brought about, but exists in this practical tension. The dialectical nature of Being is merely exemplified in the ethical dialectic of the good.

The agnostic (scientific-empirical, subjectivistic, and moralistic) negation of ontology is the necessary counterpoint against the dogmatic undialectical affirmation of it. Dogmatic-empiristic ontology recognizes the problem of Being,

but takes "the results of science" and constructs them into pseudo-absolutes. For example, as naturalistic-realistic metaphysics, it constructs a world-view, in which Being is seen as a necessary evolution "from the nebula to the superman"; or, as a pseudo-religious, theosophical, or even astrological system, it constructs Being in terms of a providential "higher" knowledge. Such dogmatic ontologies overlook the critical negative provision of the ontological argument, according to which all experiences are contingent, unnecessary. Nowhere in experience is there something which has inevitable or absolute Being, which might not just as well not be. A dogmatic ontology stops the open and problematic process of scientific research and covers the uncertainty of the practical world by a seeming and illusory, constructed "certainty." *Agnostic protest and dogmatic speculation demand each other.* This they have in common — they misunderstand Being in terms of experiential beings, the one positively, the other negatively.

IV

KANT AND THE ONTOLOGICAL ARGUMENT

Kant is supposed to have refuted the ontological argument and to have laid it to rest once for all — which did not prevent Hegel from restoring its truth in his last lectures on the so-called proofs of God's existence, which he gave immediately before his sudden death.

Kant's philosophical authority is such that we cannot afford to bypass in silence his critique of the ontological argument. Fortunately, a scrutiny of this greatest critic has brought this result, that his so-called refutation is not at all the refutation of the ontological argument, but merely a refutation of the spurious, the pseudo-ontological argument in its Gaunilean or Thomistic version. And *that* refutation stands. Kant says against this pseudo-ontological argument the same thing which Gaunilo already has said, namely that the idea of a perfect being, including the existence of that perfection, does not therefore assure us of its actual existence, just as the "idea" of the hundred dollars does not buy us any goods.

The real ontological argument, on the contrary, is not only not refuted, but Kant's whole critical philosophy itself rests precisely in the dialectic between an impossible "absolute idealism" and an equally impossible agnostic empiricism.

To demonstrate this thesis and to understand the systematic function of Kant's "critique of the ontological argument," it is necessary to remind ourselves briefly of the general outline of his critical philosophy.

The main thesis of the first part of the *Critique of Pure Reason* and of the *Prolegomena* is this, that any known reality (reality as object of scientific knowledge) is a synthesis *a priori* of a perceivable given material, appearing in the universal *a priori* or pure forms of intuition (space and time), and of logical *a priori* and pure functions of reason, formulated as categories. The principle of this synthesis says that conditions which make propositions possible and true are the same, identical conditions which make objects of knowledge real. (Die Bedingungen der Möglichkeit der Erfahrung überhaupt sind zugleich Bedingungen der Möglichkeit der Gegenstände der Erfahrung und haben darum objektive Gültigkeit in einem synthetischen Urteile *a priori*.) This implies that a *critical idealism* can describe scientific experience from the side of the logical functions, which formulate the rules according to which true judgments can be formed, since no "things themselves" walk into our minds to announce what they are; but it also implies that a *critical realism* can describe the same logical functions as laws constituting the formal pattern of objects and their behavior. Both standpoints are merely moments within the whole synthesis of experience; and they both are critical, if they remember that they present merely the events of experience if and when they are known. The events themselves, however, happen and meet observers as they are perceptually given. The total synthesis of known "reality" thus is a synthesis of opposites, which can neither be separated nor identified. Kant's "experience" is a *dialectical unity of those opposites of logical form and material content*.

But against this experiential reality in the form of being-known stands the existential reality of man in the form of being-done. This human existence, enacting itself, producing

itself as its own product, is governed by "the idea of practical reason." This practical reason Kant calls the faculty of the unconditional (*Vermögen des Unbedingten*). It is rooted in the idea of an unconditional unity, which appears in the "categorical imperative": Unify your life! Bring about a harmony of your many interests! And treat others as organs of the same unconditional task, as ends in themselves and not merely as means to your own private pleasures, profits and hypothetical ends! This idea of reason functions in knowledge as a regulative view of an infinite process. It enables man to call any achieved and formulated knowledge in question and to demand proof and verification. But reason itself can not be called in question, because it is that by virtue of which anything given is questionable. Life, under the guidance of practical reason, ought to be harmonious, unified, agreeing with itself. This is an "ought" because experience fails to offer it as a fact to observation. Practical reason is never a given fact, but as the idea of a "divine man in man" it serves as a standard, in comparison with which we shall judge ourselves. If we try to picture it, we have nothing but the "mere fiction" (*blosse Erdichtung*) of Utopian novels. The idea of practical reason remains a principle of ethical self-knowledge, and enables man to renew constantly his good will and to practice constantly his sense of practical fairness. It prevents his claim to possession of goodness, or to dispose over others for their own good.

We note: Practical reason no less than scientific reason is a synthesis *a priori* of an unconditional formal unity and given tendencies and living interests. *It is an existential unity of those opposites of ethical form and living content.*

If we call that which is known as factually given "world," and that which is characterized by the ethical demand of what ought to be "soul," then world and soul form a new pair of contrary opposites. How are these to be thought together as manifestations of the one and same universe? Kant wavers here between two possibilities. In the last part of the *Critique of Pure Reason* (*Methodenlehre*), he says that they cannot and shall not be thought together. True knowledge is restricted to its scientific use, and true action is restricted to the simple

fulfillment of moral obligations in action. Philosophy comes in only as a police court comes in, when there is trouble. Trouble arises, on the one hand, when science transgresses its restrictions and becomes scientism. Instead of resigning itself to the empirical-logical construction of objects, it renders pseudo-metaphysical verdicts on metaphysical questions which are not of its reach. And trouble arises on the other hand, when sophists dispute and blur the dignity of practical reason. Philosophy as critique watches the property lines between world and soul and does not brook transgressors. Philosophy in this sense is merely analytical. It reflects upon the two syntheses, analyzing their constitution. Metaphysically, this aspect of Kant's philosophy expresses the existential human situation as one barred from access to the Absolute. It expresses the respect for the Absolute by not identifying it with any finite synthesis. *But this, we note, is precisely one premiss in the ontological argument itself!*

In the chapter entitled "The Ideal of Reason," however, Kant thinks through a second possibility. The Absolute, he says there, is "the sole genuine ideal of reason" (*das einzige eigentliche Ideal der Vernunft*), because it comprehends the ideas of "world" and "soul" in its own totality. Reason rises "inevitably" from different sets of conditions to the idea of an unconditional whole of all such sets, and thinks this totality as a sufficient ground of all realities. And it is for this very same reason that Kant rejects the Wolffian type of ontology, which confuses the object-world of the scientific intellect with the Absolute. For the rationalism of Wolff it was the same absolute thing-in-itself, which was known empirically in confused perceptions and rationally in clear concepts. For Kant this whole object-world is phenomenon only, appearance of absolute reality, but not identical with it.

The ideal of reason is rather disclosed to an "intellectual intuition" (*intellektuelle Anschauung*), in which we think reality as we must think it, if we let all lines of theoretical as well as of practical knowledge converge in the unity of an absolute universe.

As Being of all beings (*ens entium*) the Absolute has nothing that would stand over against it. Nothing is given to

it. Whatever there is in any sense — is posited in and by the Absolute itself. The ideal of reason thinks a totality of all possible predicates as coherent and determined by reality itself. Each moment in it would express in its own modest modification the nature of reality-as-such. Reality-as-such is thus a self-determining whole which is identical with freedom. And since nothing can drop out of it, nothing can be separated, extracted, or abstracted from it, the Absolute is strictly individual.

What, then, happens to the finite, relative, non-absolute realities? They can only be thought as negations or negative self-determinations of the Absolute. This negation, Kant explicitly states, is, of course, not merely a logical but an ontological negation: There can be no realities which could maintain themselves as absolute, and this impossibility is the Absolute's own negation of their ontological independence (*Fürsichsein*). There are, nevertheless, such finite and relative realities, and they do not let go of their own relative identity, they want to be as they are — finite and relative. Hence there are self-limitations of the Absolute, posited by it, and existing in it. Kant uses a geometrical analogy to express this ontological negativity in and of the Absolute; he says these self-limitations are like the geometrical figures limiting the one and infinite space. Applied to our finite thinking of the Absolute, this ontological negation states that our finite idea of the Absolute is never the Absolute itself, but that this, its own non-absoluteness, is precisely the position of the Absolute in and through its fallibility, mortality and subjectivity. In other words, the ideal of reason is the Unity of absolute opposites. *And this is the second premiss of the ontological argument!*

Kant goes on to say that the Absolute must not be quantified. Its individual modifications and self-limitations do not "divide" it in quantitative units. But they likewise are not logical "consequences" from it, as if the Absolute were their logical antecedent. The Absolute is neither a pantheistic aggregate nor a panlogistic rational-logical "sum."

The Absolute, finally, must also be thought as the ground and perfection of all practice (*ens summum*). As supreme

unity of value and reality the Absolute stands in a dialectical relation to the human synthesis of practical idea and vital interests. The unity and harmony of life, which in practice is an "ought" and not a "fact," is completed and perfected in the Absolute. Reality is not to be made perfect in the future, but it is eternally perfect. All tensions and oppositions of all experience is posited and justified in the eternal and perfect order of the Absolute. Our practical life lives eternally in a tension between "ought" and "is" and that practical dialectic itself is eternally willed and created as our destination. The Absolute justifies the non-absolute life in all its uncertainties and in all its problematic tensions. In relating it back to the Absolute, the finite life knows itself grounded and anchored in all its own groundless and floating transitoriness.

And then comes Kant's amazing transition to the critique of the so-called ontological argument. The ideal of reason, he says, is faultless (*fehlerfrei*), but "whether such an absolute Being (*Wesen*) exists, we do not know" (*wir sind in bezug auf die Existenz eines solchen Wesens in völliger Unwissenheit*).

"Reason assumes this idea only as a ground, without requiring that it be objectively given and to constitute itself as a thing" (*Vernunft legt diese Idee nur zum Grunde, ohne zu verlangen, dass sie objektiv gegeben sei und selbst ein Ding ausmache*). But where does the ontological argument require that the Absolute be a "given object" or "a thing"? Yes, in Gaunilo's and Thomas Aquinas' "quotation" on the "ontological argument" — but not in the ontological argument as Anselm formulates it! The ontological argument is in complete harmony with Kant, that the Absolute is not — of course it is not — a "given object" or "a thing"! And Kant's philosophy of object-thinking has made it amply clear that "given objects" and "things" are not — of course they are not — absolute reality itself. Kant most successfully then refutes the idea which tries to think the Absolute as a separate "absolute being" (*besonderes Urwesen*) apart from and in contrast to experience. Ontology pervades all realms of experience. He goes on running in wide open circles in saying that the idea of Absolute would include its existence, if it were "given," just as a

triangle must include three angles as soon as a triangle is given. But because the Absolute is not "given" in the idea of the Absolute, the idea therefore remains a mere possible idea, which does not "give" its reality. But what Kant here calls a mere possible idea is exactly that which Anselm calls an "idea in my head." Anselm's ontological argument and Kant's critique of Gaunilo's pseudo-ontological argument are again in perfect agreement! Kant's "ideal of reason" and Anselm's ontological argument are identical. But Kant fails to draw the necessary dialectical conclusion from his own premisses, which are the premisses of his whole philosophy; historically he left it to Hegel to draw it. Instead he falls back on his philosophy of science and measures ontological metaphysics by standards of physics, as if the Absolute were a scientific "given object." And this critique, we repeat, is valid — but it misses the point.

And this strange missing of the point has baneful consequences. In the *Critique of Practical Reason* those weak substitutes for the ontological argument are offered as "practical postulates." Kant says to think the Absolute is a "speculative crime" (*spekulativer Frevel*), but to believe it practically is all right. Man may "choose" in its favor, may "give his vote" for it, may make this practical "decision." What sense has this popular plebiscite, if there is nothing to be voted on? Instead of "thinking what we believe" (the "*credo ut intelligam*" of Anselm's), Kant proposes to believe and not think what we believe. He overlooks that his thinking of practical reason is also thinking and not acting. To evaluate his practical reason is philosophy, and not doing practical deeds. What does it mean to say that "God is a practical postulate"? If it means that God is not, but He has to be fabricated in the future, then the term "God" is a most superfluous term, which should be replaced by an ethical program for action now. If it means, on the other hand, and this seems to be Kant's intention, that all practical actions should be related to the idea of reason, then his so-called practical postulate is identical with the "speculative crime" of the ontological argument and his own ideal of reason. But if dialectical ontology is to be replaced by a philosophy of practice, then we have the self-contradiction that we pretend to act when we merely think what practical action is.

The philosophy of practical reason becomes a substitute of the ontological argument for Kant, because he thinks in his moral law a "Being greater than which nothing can be conceived." He falls back on his moralism, as he fell back on his philosophy of science. But in both cases he retains limitations of the scientific as well as of the practical-moral sphere. And by these limitations he demonstrates that which the ontological argument pronounces. If we had nothing but scientific experience, then we could not know the limitation of that experience. If we were nothing but practical we could not become aware of a limitation of practice. In becoming aware of both we make manifest the limited nature of all finite syntheses. And it is this point at which the ontological argument begins. The "ideal of reason" comprehends those limited unities of opposites within itself; they are the self-limitations and self-negations of the Absolute. If we use a finite standpoint to ward off the Absolute, then we affirm our negativity, our contradictoriness, as an essential moment of the life of the Absolute, without which it would not be what it is. We cannot hold on to our imperfections as if they were final, ultimate, absolute, and we cannot think the Absolute if we deprive it of our imperfections which it both affirms and negates. The Absolute is the paradox, that it is not that which it is, and that in its Non-Being it nevertheless maintains and eternally restores itself.

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DAVID HUME
AND THE PYRRHONIAN CONTROVERSY *

RICHARD H. POPKIN

During the 17th and 18th centuries various philosophers had questioned the possibility of anyone's actually being able to believe the extreme sceptical view called Pyrrhonism. Some of the figures who entered into the discussion of this matter maintained that the inability to accept Pyrrhonism somehow established a form of Dogmatism. In this paper I shall relate Hume's views about Pyrrhonism to the controversy on the subject in order to show some of their sources, and the revolutionary character of Hume's own position on this matter. It will be part of my thesis that one of Hume's greatest achievements lies in his solution of the Pyrrhonian controversy.

The importance of the controversy lies in the problem of whether the sceptic can be answered. Is philosophy doomed to uncertainty, or is there a foundation for human knowledge?

The question whether one could actually be a Pyrrhonist and suspend judgment about all matters was brought to notice in modern times with Montaigne's discussion of Pyrrhonism in his *Apologie de Raimond Sebond*. Montaigne had raised the difficulty that a Pyrrhonian cannot even state his doubts without being dogmatic, and hence not Pyrrhonian.¹

Marin Mersenne in his *La Vérité des Sciences contre les Septiques ou Pyrrhoniens* had maintained that a normal sane human being could not be a Pyrrhonist since for anyone with sound faculties some things are not in doubt. Hence Mersenne had considered Pyrrhonism a derangement and debasement of the human mind.²

In the introduction to *L'Art de Penser*, Arnauld maintained that the Pyrrhonists were unable to make us doubt certain

* I should like to express my gratitude to Professors Everett W. Hall and Ernest C. Mossner for their many helpful suggestions.

¹ Michel de Montaigne, *Essais*, Vol. II, ed. Pierre Villey, (Paris, 1922), pp. 266-7.

² Marin Mersenne, *La Vérité des Sciences contre les Septiques (sic) ou Pyrrhoniens*, (Paris, 1625), Intro., and Book I, 190 ff.

things which were evident. One cannot doubt if there is an earth, a sun or a moon, or if the whole is greater than the part. It is possible to say that one doubts, but it is not possible to actually doubt. "Thus Pyrrhonism is not a sect of people who are persuaded of what they say, but it is a sect of liars."³

The basic point of the controversy is raised in Pascal's *Pensées*, where after remarking that "le pyrrhonisme est le vrai,"⁴ Pascal states the central arguments for complete scepticism. If one accepts these invincible arguments of the Pyrrhonists,

What then shall man do in this state? Shall he doubt everything? Shall he doubt whether he is awake, whether he is being pinched, or whether he is being burned? Shall he doubt whether he doubts? Shall he doubt whether he exists? We cannot go so far as that; and I lay it down as a fact there never has been a real complete sceptic (pyrrhonien). Nature sustains our feeble reason, and prevents it raving to this extent... Nature confutes the sceptics (pyrrhoniens), and reason confutes the dogmatists.⁵

This passage, which is similar to many of Hume's statements on the subject, is offered neither as a defense of nor accusation against Pyrrhonism. Instead, for Pascal, it pictures the plight of man without Grace, and the need for God's help. However, the problem of reconciling the irrefutability of Pyrrhonism with the incredibility of it generates the controversy which we shall examine.

Of the many people who discussed the merits of Pyrrhonism in the 17th and 18th centuries, those who shall concern us are the latter-day rationalists who, following Malebranche, tried to restrict the claims of Cartesianism and yet to avoid Pyrrhonism. Arnauld had said that Malebranche's denial of any conclusive demonstration of an external world will "if taken in a strict sense... contribute towards establishing a very dangerous Pyrrhonism."⁶ Fénelon, the great theologian of the late 17th century, had attempted to defend a Malebranchian

³ Antoine Arnauld, *L'Art de Penser*, (Paris, 1724), pp. xx-xxi.

⁴ Blaise Pascal, *Pensées*, 432.

⁵ *Ibid.*, 434. See also 374, 387, and 395.

⁶ Quoted in Pierre Bayle, *Dictionnaire Historique et Critique*, art. Zeno, Remark H, note 98.

type of rationalism while denouncing Pyrrhonism.⁷ Fénelon agreed with Arnauld's comment that the Pyrrhonists were a sect of liars, not of philosophers. "They try to doubt, although the doubt is not in their power."⁸

The Scottish disciple of Fénelon, the Chevalier Andrew Michael Ramsay, 1686-1743, had in his early intellectual life been a Pyrrhonist. When he was nineteen he became interested in Socinianism and finally from his religious doubts came to accept a "pyrrhonisme universel."⁹ After studying with some protestant mystics in Holland, he was converted to Catholicism by Fénelon at Cambrai in 1709 or 1710. His most famous work was the very popular *Voyages de Cyrus*, first published in France in 1727, and in England in 1728. In the sixth book of this work Pythagoras recounts a conversation between himself and Anaximander to Cyrus.¹⁰ Anaximander starts off as an atheist, and then changes his position to that of a Pyrrhonist, doubting of everything because nothing is demonstrable. A note here by Ramsay to the reader points out the stages of unbelief — first atheism, then Pyrrhonism. In order to exhibit the weakness of Anaximander's Pyrrhonism, Pythagoras defines demonstration (geometrical and metaphysical) as a proof "not only that a thing is, but also the impossibility that it might not be." On this definition, Pythagoras continues, one cannot demonstrate the existence of bodies, nor of any fact. Only relations of ideas are demonstrable. If one desires a demonstration of facts, one is seeking for an absurdity of the same kind as trying to see sound or hear color. The absence of a demonstration is no ground for doubting if we are naturally

⁷ In calling Fénelon a Malebranchian type of rationalist, I am aware that he argued vigorously against several of Malebranche's doctrines. However, the type of systematic philosophy that Fénelon developed is Malebranchian even if some of the conclusions are not.

⁸ François de Salignac de LaMothe Fénelon, *Oeuvres*, (Versailles and Paris, 1820-30), Vol. I, p. 350. The same charge is made in a dialogue called "Pyrrhon et son Voisin, Absurdité du pyrrhonisme," Vol. XIX, pp. 246-8.

⁹ Cf. Albert Cherel, "Ramsay et la Tolérance de Fénelon," *Revue du Dix-Huitième Siècle*, V (1918), p. 19.

¹⁰ Andrew Michael Ramsay, *Voyages de Cyrus*, (Paris, 1807), p. 228.

led to believe.¹¹ At this point Ramsay breaks in with another note stating,

*The source of Pyrrhonism comes from failing to distinguish between a demonstration, a proof and a probability. A demonstration supposes that the contradictory idea is impossible; a proof of fact is where all the reasons lead to belief, without there being any pretext for doubt; a probability is where the reasons for belief are stronger than those for doubting.*¹²

Demonstrations are only possible for eternal and immutable ideas. On matters of fact, such as the existence of bodies, the constant uniformity and relations of our sentiments constitute a proof.¹³ Anaximander tries to use this distinction to establish his case. Our sentiments are uncertain since indemonstrable and our ideas are as uncertain as our sentiments since we may be deceived even about what seems most certain.¹⁴

Pythagoras then gives his final answer to Pyrrhonism —

¹¹ *Ibid.*, p. 229. "L'on ne saurait prouver ainsi l'existence des corps... On peut démontrer la liaison des idées, mais les faits ne se prouvent que par le témoignage des sens. Demander des démonstrations où il s'agit des sentiments, placer les sentiments où il faut des démonstrations, c'est renverser la nature des choses, c'est vouloir voir des sons et entendre des couleurs. Quand tout nous porte à croire, quand rien ne nous force à douter, l'esprit doit se rendre à cette évidence. Ce n'est pas une démonstration géométrique; ce n'est pas non plus une simple probabilité; mais c'est une preuve suffisante pour nous déterminer." In Mary Shaw Kuypers work, *Studies in the Eighteenth Century Background of Hume's Empiricism*, (Minneapolis, 1930), p. 95, a passage almost identical in some respects is quoted from Frances Hutcheson.

¹² *Ibid.*, pp. 229n-30n. Malebranche had emphasized the distinction between demonstrations and proofs in his answer to Arnauld, *Réponse du Père Malebranche au Livre des vraies et des fausses Idées*, in *Oeuvres Philosophiques de Antoine Arnauld*, ed. by Jules Simon, (Paris, 1843), pp. 443-50. Here Malebranche claims there are proofs of the existence of bodies, but no demonstrations.

¹³ Ramsay, *op. cit.*, p. 230. "Je crois qu'il y a des corps, non sur le témoignage d'un seul ni de plusieurs sens, mais sur le consentement unanime de tous les sens, dans tous les hommes, dans tous les temps et dans tous les lieux. Or, comme les idées universelles et immuables nous tiennent lieu de démonstrations dans les sciences, de même l'uniformité continue et la liaison constante de nos sentiments nous tiennent lieu de preuves, lorsqu'il s'agit de faits."

¹⁴ *Ibid.*, pp. 230-1.

the nature of our mind is such that we cannot refuse to believe the truth when it is clearly perceived. We are not free to doubt, and when we cannot doubt we have conviction, and this is as far as human reason can go. If one looks inside oneself one will find a sentiment of divinity that will dissipate all doubts and abolish Pyrrhonism. If one insists on obtaining demonstrations one will be driven to believe the greatest absurdities, such as that experience is a dream, that I am the only being in universe, etc. If one accepts what one cannot really doubt, one will have an intelligent system of thought. If one insists on doubting, one will fall into an insane philosophical delirium.¹⁵

Thus in Ramsay's analysis of Pyrrhonism, the sceptical view that facts cannot be demonstrated is accepted. The possibility that truths about ideas are false is not really rejected. But Pyrrhonism is answered because we believe not as a result of demonstrations, but on the basis of proofs, i.e., evidence forcing us to accept a conclusion, but not demonstrating the conclusion.

This type of answer is further developed in Andrew Baxter's *An Enquiry into the Nature of the Human Soul*.¹⁶ Baxter, 1686-1750, like Ramsay, was a Scotsman. He was a follower to some extent of Dr. Clarke. His *Enquiry* was published in 1733, 1737, and 1745. The most famous part is the chapter in the second volume entitled "Dean Berkeley's scheme against the existence of matter, and a material world examined, and shown inconclusive." Berkeley is here presented as advocating a type of scepticism which begins by doubting the existence of a material world and insisting that any demonstration of such a world would be impossible and contradictory.¹⁷

¹⁵ *Ibid.*, pp. 231-5.

¹⁶ Andrew Baxter, *An Enquiry into the Nature of the Human Soul*, Second edition, Vol. II (London, 1737).

¹⁷ I have briefly discussed this interpretation of Berkeley in my article "Berkeley and Pyrrhonism," *Review of Metaphysics*, V, (1951-2), pp. 244-6. Further comments on Baxter's answer to Berkeley can be found in Dugald Stewart, *Collected Works*, ed. Sir Wm. Hamilton, (Edinburgh, 1854), Vol. I, pp. 429-30, and Vol. V, pp. 420-1, James McCosh, *The Scottish Philosophy*, (New York, 1875), pp. 42-9; Kuypers, *op. cit.*

In order to answer this view, Baxter develops at great length the reason why the existence of a material world is indemonstrable. His argument is essentially that of the Malebranchian tradition. A demonstration if it is "absolute" must always have been true. Such a demonstration can be given about essences or natures, or regarding the Divine Being since His Existence is part of His Nature, but no such demonstration can be given of the existence of anything else, since other things are possible but not necessary. The existence of matter, soul, or any other finite material being is only contingent. And "because it cannot be shown that a contingent Being exists necessarily, some people [Berkeley and the Sceptics or Pyrrhonists] have used this as a basis for doubting if matter exists."¹⁸ The sceptics have a fixed resolve to doubt on the point although they really have no reason for doubting. Baxter appeals to a quotation from Ramsay to show this.¹⁹ Our sense experience gives us ample evidence of the existence of material things, all the evidence that can be given for such a problem, and all that a reasonable man can desire.²⁰ The sceptic who forces himself to doubt is trying to do the impossible, because human beings really cannot achieve the absurd state of doubting what they all believe without destroying their reasoning faculties. "There are some truths so glaring that a man cannot *cast doubt upon them*, without committing violence on his reason."²¹ Whenever the sceptic argues against a view he is forced to give up his scepticism and to accept something in order to argue. Were the sceptic consistent, he would always

p. 81; and Sydney C. Rome, "The Scottish Refutation of Berkeley's Immaterialism," *Philosophy and Phenomenological Research*, III (1942-3), p. 324n.

¹⁸ Baxter, *op. cit.*, p. 267. The problem of the indemonstrability of the existence of all beings other than God is developed in pp. 261-8, 316-8 and notes (v) and (x), pp. 317-8.

¹⁹ *Ibid.*, p. 317, note (v). The quotation is that which appears on p. 3, Ramsay, *op. cit.*, pp. 229n-30n.

²⁰ Baxter, *op. cit.*, p. 267, 316, and notes (v) and (x), pp. 317-8. In the latter note Baxter appeals to Locke and Ramsay for support, and quotes the passage from Ramsay given in n. 13 on this paper, Ramsay, *op. cit.*, p. 230.

²¹ Baxter, *op. cit.*, note (f), p. 276. See also pp. 272n-76n, and 301.

be silent.²² And, thus, although our knowledge of existence of objects cannot amount to a demonstration, no sane man can really doubt of their existence since such doubts just "will not admit of belief."²³ The Pyrrhonist tries to support an incredible doubt by appeal to an "obvious" point — that the contingent is not necessary. Thus again the Pyrrhonist's arguments are not refuted, but his doubts are claimed to be impossible.

A somewhat similar theme was developed by the Swiss philosopher, Jean Pierre de Crousaz, 1663-1750, who was by and large a Lockean. His writings are on many and diverse subjects such as aesthetics, logic, metaphysics, physics, mathematics, and Pope's *Essay on Man*. The discussion of Pyrrhonism appears briefly in his very popular *La Logique ou Système de Réflexions*, first published in 1712 and reprinted in French and English in several enlarged subsequent editions up to 1741. A much more elaborate treatment of the subject appears in Crousaz's *Examen du Pyrrhonisme ancien & moderne*, published in 1733, in which the writings of Sextus Empiricus, Pierre Bayle, and Bishop Huet are examined and refuted almost line by line.²⁴ Crousaz was seriously worried about the growing popularity of Pyrrhonism and its possibly disastrous consequences for morality and religion. The phenomenal success of Bayle's "historical Pyrrhonism" led to the *Examen du Pyrrhonisme*.²⁵

²² *Ibid.*, p. 272n, note (a), pp. 322n-25n, and Vol. I, p. 358.

²³ *Ibid.*, Vol. II, p. 301. The same point had been made earlier in the 1719 review of the Fabricius edition of Sextus Empiricus in the *Journal des Sçavans*, LXV, p. 671. "Car, qu'y a-t-il de plus frivole, que de s'occuper à former de foibles objections contre les choses les plus évidentes, & dont on ne s'est jamais avisé de douter dans l'usage de la vie?"

²⁴ Jean Pierre de Crousaz, *La Logique ou Système de Réflexions*, 4th edition, (Lausanne and Geneva, 1741); *A New Treatise of the Art of Thinking or, A Compleat System of Reflections*, (London, 1724), (this is the English translation of the 2nd edition of *La Logique*); and *Examen du Pyrrhonisme ancien et moderne*, (La Haye, 1733).

²⁵ In *La Logique*, Vol. V, pp. 129-33, Crousaz reveals the extent to which he was disturbed and shocked by knowing Claude Huart, the French translator of Sextus Empiricus. Some of Crousaz's views regarding Huart are mentioned in my forthcoming note on "Samuel Sorbière and the French translation of Sextus Empiricus," *Journal of the History of Ideas*.

Crousaz's treatment of Pyrrhonism is primarily a consideration of it as the worst form of madness. His concern is first of all to comprehend its psychological and cultural causes and possible remedies,²⁶ and next to undermine its intellectual pretensions. The general theory is that due to certain disputative personality traits, a certain vanity, the endless attacks against reason by mystics, "mauvais Chrétiens," etc., some unfortunate people are led to this "renversement" of nature — Pyrrhonism. There are two kinds of Pyrrhonists — first, the total doubters who are really just incurable madmen, and second, the sometime doubters who doubt in order to be disputatious, but when the dispute is over return to normal sentiments and beliefs because they cannot stifle nature.²⁷ The intellectual arguments supporting either the full-time or part-time Pyrrhonist consist in general of showing that we can never find sufficient evidence that any proposition states what is true.²⁸ We are deceived over and over again when we think we have evidence.²⁹ If we seek principles to prove our propositions, then we have to prove the principles, etc.³⁰ Therefore, we remain in suspense of judgment.

Crousaz's answer consists not as Ramsay's and Baxter's did in showing why such evidence could not be obtained, but in maintaining that in spite of the difficulties and mistakes and

²⁶ Cf. *Examen*, Part I, Sections II and III, *La Logique*, Vol. V, Chap. V, pp. 64-136. *A New Treatise*, II, pp. 123 ff. In this brief discussion of Crousaz's views on Pyrrhonism, it is not possible to do justice to the vast barrage against old and new Pyrrhonism that is let loose in the seven hundred seventy-six double columned folio pages of the *Examen*. The author intends in the future to complete a more thorough analysis of this work and its role and influence in 18th century thinking about scepticism.

²⁷ *Examen*, pp. 1-34; *A New Treatise*, II, p. 120; and *La Logique*, V, pp. 67 ff.

²⁸ *Examen*, p. 74, "Le grand raisonnement des Sceptiques est celui-ci. Pour être assuré qu'une Proposition est vraie, il faudrait être assuré que les choses sont effectivement telles qu'elle les énonce. C'est parce qu'on ne peut se procurer cette certitude qu'on est forcé de demeurer dans le doute et dans la suspension."

²⁹ *Ibid.*, pp. 75-6.

³⁰ *A New Treatise*, p. 145.

deceptions in finding sufficient evidence, there are rules which, though they do not guarantee truth, do guard us against obvious errors. Following such rules as he lays down in his *Logique* we will be led to enough assurance of what we naturally believe, so as not to be worried by serious doubts. The rules are mainly simple, empirical ways of avoiding mistakes by making careful observations, definitions, and so on. By and large the central epistemological difficulties in finding sufficient evidence are ignored in favor of showing how to discover satisfactory evidence in support of what all except complete madmen believe anyway.³¹ Thus, once more, Pyrrhonism is answered not by logically refuting it, but by claiming it is incredible, and that by operating by certain rules, we will not reach dubious conclusions, even if we cannot prove their truth.

The great defender of Pyrrhonism, Pierre Bayle, against whom Crousaz had fought, had himself doubted that Pyrrho could have lived in a state of continual suspense of judgment.³² The translator of the article in Bayle's *Dictionary* on Pyrrho had felt required to expand on this theme in order to break the force of Bayle's Pyrrhonism. The expansion consists of a lengthy statement drawn from Crousaz. Only a madman is a complete sceptic. Nature forces us to believe, and this compulsion of nature cannot be extinguished. The sceptic himself in defending his views does not believe them. Even if his attacks on our beliefs were well founded, it would make no difference, since fortunately we accept them and live by them. The consequences of such madness as Pyrrhonism would be the destruction of religion, piety, justice, commerce, and society.³³

³¹ This theory of rules comes up all the time throughout the *Examen*. Either Crousaz shows that the Pyrrhonist's arguments are senseless unless he has rules, or else Crousaz advances some rules. See for example pp. 74-5 and 357-8. The rules are given in the *A New Treatise*, e.g., pp. 44 and 482 ff.

³² Pierre Bayle, *A General Dictionary Historical and Critical*, 10 vols., London, 1734-41, Vol. VIII, (London, 1739), article "Pyrrho," p. 559, text and Remark D.

³³ *Ibid.*, pp. 601-2, translator's Remark A. In the preface to the first volume, (London, 1735), the translators said that they would use materials from "a very eminent writer, Mr. Crousaz" to counteract the Scepticism of Bayle. This addition was placed in the Supplement to the French

In this atmosphere of condemning Pyrrhonism because it cannot be believed, and because the Pyrrhonist seeks too strong a ground for belief, there emerges the greatest defender of Pyrrhonism, David Hume. Hume accepts the thesis that no one can believe Pyrrhonism because nature is too strong, but employs this not to disprove Pyrrhonism, but to offer a "consistent" Pyrrhonism. I shall try to show that Hume utilizes the anti-sceptical arguments of Ramsay, Baxter, and Crousaz to advocate an even stronger Pyrrhonism, by showing that we have no *grounds* for any beliefs, regardless of what we may be compelled to believe. Philosophical Pyrrhonism is unaffected by the force of natural belief. What one believes has nothing to do with the justification of belief. The sceptic is a believer like anyone else, but the sceptic is also a sceptic. In his belief he still exhibits his scepticism.

That Hume knew something of the Pyrrhonian controversy is obvious both from his remarks on Pyrrhonism in the *Enquiry Concerning Human Understanding* and the *Dialogues Concerning Natural Religion*, and from certain external facts. Hume employs phrases similar to those of Ramsay, Baxter, and Crousaz; in fact, he uses Ramsay's distinction between demon-

edition of 1740 and developed a little farther with some more Crousaz material. Cf. Jacques Georges de Chauffepié, *Nouveau Dictionnaire Historique et Critique*, (Amsterdam and La Haye, 1753), Vol. III, pp. 258, 260. There was great interest in Crousaz's attack on Pyrrhonism in the 1730's, and even an attempt at a Pyrrhonian reply in de Monier's edition of the *Nouvelles Lettres de Bayle*, (La Haye, 1739), in which appeared an "Apologie de Mr. Bayle ou Lettre d'un Sceptique sur l'Examen du Pyrrhonisme, pour servir de Réponse au Livre de Mr. de Crousaz sur le Pyrrhonisme." This work is discussed in de Chauffepié's edition of Bayle's *Dictionnaire*, Vol. I (Amsterdam and La Haye, 1750), article "Bayle," p. 154B, remark GGG.

³⁴ David Hume, *A Treatise of Human Nature*, Selby-Bigge edition, (Oxford, 1949), p. 124. "For this reason 't would perhaps be more convenient, in order at once to preserve the common signification of words, and mark the several degrees of evidence, to distinguish human reason into three kinds, viz. *that from knowledge, from proofs, and from probabilities*. By knowledge, I mean the assurance arising from the comparison of ideas. By proofs, those arguments, which are deriv'd from the relation of cause and effect, and which are entirely free from doubt and uncertainty. By probability, that evidence, which is still attended with

strations, proofs, and probabilities.³⁴ He quotes Arnauld's remark about the Pyrrhonists being liars.³⁵

There are also certain historical facts that show that Hume knew this literature. Hume was very interested in Fénelon as can be seen in the references to him in his notebooks.³⁶ He was an avid reader of Bayle's *Dictionary*.³⁷ He would have seen the translator's note to the "Pyrrho" article in almost any edition available to him after 1739. He might have seen Crousaz' works, or any of the several reviews of the *Examen* in England.³⁸ Lastly, Hume knew Ramsay personally. One of Hume's best friends, Michael Ramsay, was a relative of the Chevalier Andrew Michael Ramsay. When Hume went to France to write his *A Treatise of Human Nature* he went immediately to Paris to see Chevalier Ramsay, who wine and dined him, and gave him some letters of introduction.³⁹ Ramsay is quoted and discussed at length in a note in *The Natural History of Religion*.⁴⁰

uncertainty." See also John Laird, *Hume's Philosophy of Human Nature*, (London, 1932), p. 90n.

³⁵ David Hume, *Dialogues Concerning Natural Religion*, Kemp Smith ed., (London, 1947), p. 137.

³⁶ "Hume's Early Memoranda, 1729-1740: The Complete Text" edited with Foreword by Ernest Campbell Mossner, *Journal of the History of Ideas*, IX (1948), pp. 498 and 502, numbers 35-7.

³⁷ *Ibid.*, pp. 494-5 and 500-502, numbers 4-8, 10, 14, 16, 19, 21, 28-30, and 32-4. See also Hume's letter to Michael Ramsay, March 1732, *Letters of David Hume*, ed. J. Y. T. Greig, (Oxford, 1932), Vol. I, p. 12 and Norman Kemp Smith, *The Philosophy of David Hume*, (London, 1949), pp. 325-38, and 506-16; and *Dialogues*, pp. 80-6.

³⁸ Léo Pierre Cortines, *Bayle's Relations with England and the English*, (New York, 1938), pp. 69, 78 and 93-4, cites three reviews in the *Present State of the Republic of Letters*, X, Dec. 1732, pp. 439-60, *Historia Litteraria*, IV, articles XII and XX, 1733, pp. 226-45 and 368-90.

³⁹ David Hume, *Letters*, letters to Michael Ramsay and James Birch, both dated Sept. 12, 1734, pp. 19-22.

⁴⁰ David Hume, *The Natural History of Religion in Essays and Treatises on Several Subjects*, Vol. II, (London, 1768, pp. 497n-9n. Here Hume calls Ramsay "an author of taste and imagination, who was surely no enemy to Christianity... a writer who had so laudable an inclination to be orthodox, that his reason never found any difficulty, even in the doctrines which free-thinkers scruple the most, the trinity,

Elsewhere ⁴¹ I have analyzed the character of Hume's own Pyrrhonism and his critique of the traditional form of this view, and will only summarize my thesis here. Hume maintained in far clearer and more significant fashion than Pyrrhonists or quasi-Pyrrhonists like Montaigne, LeVayer, Glanvill, Huet or Bayle, that we can never have grounds for beliefs, whether factual, moral, or demonstrable. By careful, systematic analysis Hume had tried to show that no belief of any of these kinds could be supported by adequate evidence that would demonstrate it. His thesis went further than that of any of his predecessors in making clear why factual and moral beliefs are indemonstrable, through his causal analysis and his careful defense of his ethical naturalism. With regard to demonstrable beliefs in mathematics and theology, Hume tried to show that the Pyrrhonian contention also holds. At first Hume stated that no knowledge of the world could be gained through true, mathematical demonstrations since the results were tautologous. He later went on further to argue that even if mathematical propositions can be demonstrated no human being can be certain that any particular sequence of propositions constitutes a demonstration. And lastly, the results of some accepted mathematical demonstrations contradict other propositions accepted

incarnation, and satisfaction. His humanity alone, of which he seems to have had a great stock, rebelled against the doctrines of eternal reprobation and predestination." The quotation from Ramsay is from his *Philosophical Principles of Natural and Revealed Religion*.

Ramsay originally thought Hume a brilliant youngster, but was later disappointed since Hume was not destined to be Fénelon's second Scottish disciple. Ramsay said of Hume, "By the little I heard from and read of that young gentleman, he seems to me far from being a true master of metaphysics... That bright ingenius young spark does not seem to me to have acquired a sufficient stock of solid learning, nor to be born with a fund of noble sentiments, nor to have a genius capable of all that geometrical attention, penetration and justness, necessary to make a true metaphysician. I am afraid his spirit is more lively than solid, his imagination more luminous than profound, and his heart too dissipated with material objects and spiritual self-idolatry to pierce into the sacred recesses of divine truths." Quoted in J. Y. T. Greig, *David Hume*, (London, 1931), p. 91.

⁴¹ Richard H. Popkin, "David Hume: His Pyrrhonism and His Critique of Pyrrhonism," *Philosophical Quarterly*, I, (1950-1), pp. 385-407.

as true by all people. Thus we are led to the Pyrrhonists' problem here too, that we can never have adequate grounds for maintaining that any mathematical proposition is true.⁴²

With regard to theological propositions, Hume denies that any are demonstrable, that some of the key concepts in them, like "substance" and "necessary existence," mean anything; he contends that theological propositions are really just factual ones, and as groundless as any other factual proposition. It is on this basis that he attacks Malebranche's theology.⁴³

The propositions that form Hume's conclusions are also without adequate foundation as Hume admits. Some of the conclusions contradict views that everyone accepts, like his analyses of "body," "self," and "God." The only basis for accepting the conclusions is one's preferences.

Thus all probable reasoning is nothing but a species of sensation. 'Tis not solely in poetry and music, we must follow our taste and sentiment, but likewise in philosophy. When I am convinc'd of any principle, 'tis only an idea which strikes more strongly upon me. When I give the preference to one set of arguments above another, I do nothing but decide from my feeling concerning the superiority of their influence.⁴⁴

All reasonings are caused by natural processes and have no grounds, only explanations. And to make matters worse, the naturally caused reasonings conflict. One is led by reasoning to become sceptical of demonstrations, of the existence of bodies, of the existence of a self and of God. One is led by other natural processes to disregard these reasonings and accept the dubious conclusions. Our causal habit of thinking leads us to conclusions which other natural types of reasoning

⁴² Cf. Hume, *Treatise*, pp. 68-72, and 180-7; *Enquiry*, pp. 155-8; and Popkin, "David Hume: His Pyrrhonism and his Critique of Pyrrhonism," *op. cit.*, pp. 390-1, 393, and 397.

⁴³ Cf. Hume, *Treatise*, pp. 159-60, and 219-51; *Dialogues*, pp. 188-92 and 214-28. In Søren Kierkegaard's *Philosophical Fragments*, (Princeton, 1946), the Pyrrhonian case on this matter is made much clearer. Theological and mathematical propositions deal with definitions and are all tautologous. Cf. pp. 32n-33n and 59 ff; and Richard H. Popkin, "Hume and Kierkegaard," *Journal of Religion*, XXXI, (1941), pp. 276-8.

⁴⁴ Hume, *Treatise*, p. 103. See also pp. 187-218, 231, 265-74, and 633-6. This point is discussed further in Popkin, "David Hume: His Pyrrhonism and his Critique of Pyrrhonism," *op. cit.*, pp. 394 ff.

deny. What can any philosophical analysis lead us to? Only Pyrrhonian doubts. All reasoning is based on non-rational factors and can be given no adequate rational defense. Thus "if reason be considered in an abstract view, it furnishes invincible arguments against itself, and that we could never retain any conviction or assurance, on any subject."⁴⁵

Pyrrhonism is irrefutable. And here Hume's presentation is total and sweeping. If his analysis is accepted, all grounds for propositions are swept away. Thus Hume carries on the admission of Ramsay, Baxter and Crousaz to its final, disastrous conclusion. If the rationalists once admit that they cannot give demonstrations for their views, then they admit that these views are without foundation, and hence Pyrrhonism triumphs. The rationalists showed that their whole position had no more demonstrative evidence than any other. And on this level of analysis, all the Pyrrhonist desires to show is the groundlessness of any position.

But what of the defense the critics of Pyrrhonism had made? Pyrrhonism may be irrefutable, but nature makes us believers, and hence Pyrrhonism can be ignored. Hume once again surpasses his predecessors. "Philosophy would render us entirely Pyrrhonian were not Nature too strong for it."⁴⁶ Hume carefully points out that it is impossible to be a Pyrrhonist.

Shou'd it here be ask'd me, whether I sincerely assent to this argument, which I seem to take such pains to inculcate, and whether I be really one of those sceptics, who hold that all is uncertain, and that our judgment is not in *any* thing possess'd of *any* measures of truth and falsehood; I shou'd reply, that this question is entirely superfluous, and that neither I, nor any other person was ever sincerely and constantly of that opinion. Nature, by an absolute and uncontrollable necessity has determin'd us to judge as well as to breathe and feel; nor can we any more forbear viewing certain objects in a stronger and fuller light, upon account of their customary connexion with a present impression, than we can hinder ourselves from thinking as long as we are awake, or seeing the surrounding bodies, when we turn our eyes towards them in broad

⁴⁵ Hume, *Dialogues*, p. 135. See also *Treatise*, pp. 183-7, and Conclusion, pp. 263-74; *Enquiry*, Section XII, pp. 148 ff; and Popkin, *ibid.*

⁴⁶ David Hume, *An Abstract of "A Treatise of Human Nature,"* (Cambridge, 1938), p. 24.

sunshine. Whoever has taken the pains to refute the cavils of this total scepticism, has really disputed without an antagonist, and endeavour'd by arguments to establish a faculty, which nature has antecedently implanted in the mind, and renders unavoidable.⁴⁷

Nature does not logically refute Pyrrhonism, it only makes it unbelievable. The philosophical force of the arguments remains intact, but their psychological force is nil. Hume then develops his theory of natural belief showing all the beliefs of a factual, moral, metaphysical, theological and mathematical variety that nature compels us to believe.

The great change in this tale of Pyrrhonism being criticized as incredible comes at this point. Hume sees that the natural limitations of belief in no way deny the philosophical force of Pyrrhonism. The Pyrrhonist cannot suspend judgment on all matters without going berserk. But this *does not* mean that the Dogmatist is thereby vindicated. Natural belief is still groundless even if forced upon us. What we believe is a matter of nature and not grounds.

It seems evident, that the dispute between the sceptics and the dogmatists is entirely verbal, or at least regards only the degrees of doubt and assurance, which we ought to indulge with regard to all reasoning: And such disputes are commonly at the bottom, verbal, and admit not of any precise determination. No philosophical dogmatist denies, that there are difficulties both with regard to the senses and to all science: and that these difficulties are in a regular, logical method, absolutely insolveable. No sceptic denies, that we lie under an absolute necessity, notwithstanding these difficulties, of thinking, and believing, and reasoning with regard to all kind of subjects, and even of frequently assenting with confidence and security. The only difference, then, between these sects, if they merit that name, is that the sceptic, from habit, caprice, or inclination, insists most on the difficulties; the dogmatist, for like reasons, on the necessity.⁴⁸

The Humean sceptic, the consistent Pyrrhonian, will doubt when he must and believe when he must. He will be as dogmatic as nature requires and as sceptical as nature requires. This can be put in one of Hume's best metaphors. In the closet the consistent Pyrrhonist doubts everything, because that is where

⁴⁷ Hume, *Treatise*, p. 183. See also p. 187; *Enquiry*, pp. 149-60, esp. 150-60; and Popkin, *op. cit.*, pp. 395 ff.

⁴⁸ Hume, *Dialogues*, p. 219n. A similar point is made in the conclusion to Book I of the *Treatise*, especially pp. 273-4.

philosophical enquiry carries him. As soon as he leaves the closet his doubts are dissipated and in the common affairs of life the consistent Pyrrhonist believes with as much force as nature requires whatever factual, moral, metaphysical, theological and mathematical views he is compelled to.⁴⁹

The significance of this consistent Pyrrhonism is first of all that it renders innocuous the objection of incredibility. Once the rationalists admit the force of the Pyrrhonian doubts in saying that they are irrefutable, the doubts achieve their philosophical goal. Whether or not one could believe them becomes *philosophically irrelevant* though of great *psychological* interest.⁵⁰ The causes of belief and the grounds of belief are two different matters. The philosophical interest of the sceptical barrage of the Pyrrhonist lies in the latter problem. Ramsay, Baxter, and Crousaz's criticism falls to the ground, and the ghost of Pyrrho rises again to threaten the dogmatist. But the new Pyrrho, David Hume, is not as foolish as the original one. The new Pyrrho joins the old one in offering an irrefutable challenge to dogmatic rationalism, but the new Pyrrho then avoids the absurdity of trying to suspend judgment when one really can not. The ancient Pyrrhonists like their rationalist opponents accepted the view that a proposition *ought* to be accepted if and only if there were adequate rational grounds for it. Hume sees that the acceptance of a proposition is a matter of nature and not philosophy. Utilizing the stock answer of the rationalists to the Pyrrhonists, Hume turns it into a new victory of the Pyrrhonists.

The whole edifice of a rationalism built on the forced belief in clear and distinct ideas crumbles. If the forcing relates only to causes and not to grounds, this kind of rationalism as a systematic basis of knowledge tumbles — though it might survive as a set of beliefs actually held. Only an irrational or groundless ground can survive this separation of the closet and the world. If Pyrrhonism is irrefutable in the closet, it is irrefutable though unbelievable in the world. The worst fears of

⁴⁹ Cf. Hume, *Treatise*, p. 455. Thus Hume's consistent Pyrrhonist is somewhat like Crousaz' part-time or some-time Pyrrhonist.

⁵⁰ On this point see Pascal, *Pensées*, 374.

Descartes, Arnauld, Malebranche, Fénelon and others are realized — the Pyrrhonist triumphs.

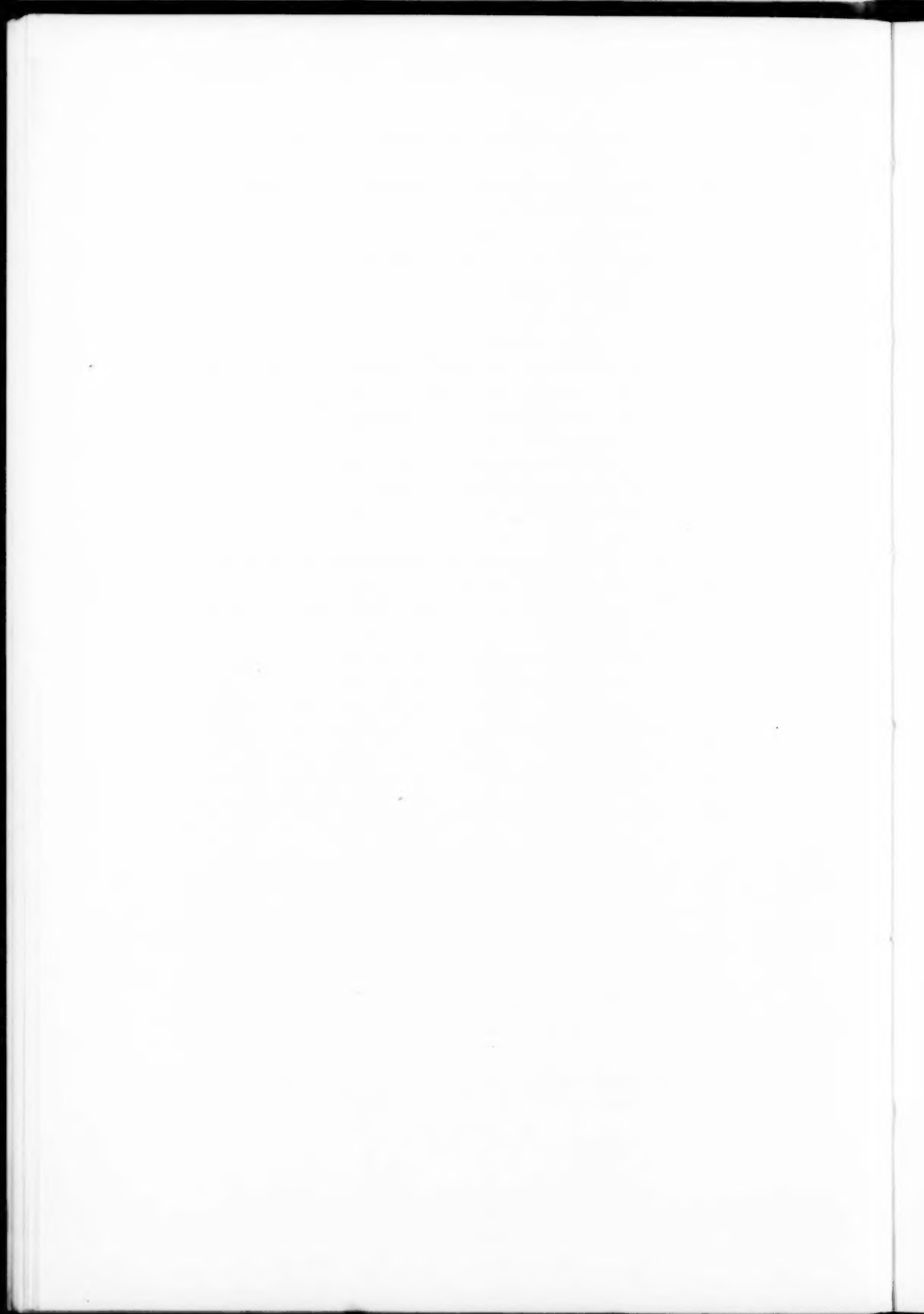
Hume solves the Pascalienne dilemma — Pyrrhonism or rationalism, consistency or credibility — by having both, the former in the closet, the latter in the world. The appeal to God for help is unnecessary.

Philosophy after Hume must either live with its unconquerable Pyrrhonian doubts in the closet unchecked by what goes on in the world, or offer a new basis of knowledge to replace that of forced or natural or instinctive belief. The strong fideistic strain in modern philosophy from Hamann and Kierkegaard to William James and George Santayana in part represents a way of living in the world by keeping the unconquered Pyrrhonism in the philosophical cabinet.⁵¹

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⁵¹ On this matter see the excellent article of Philip Merlin, "Hume and Hamann." *Personalist*, Vol. XXXII, (1951), pp. 11-18.





Critical Studies

GEORGE BERKELEY, 1685-1753 ¹

PART I

J. P. DE C. DAY

The chief thing I do or pretend to do is onely to remove the mist or veil of Words.²

... 'tis on the Discovering of the nature and meaning and import of Existence that I chiefly insist... This I think wholly new.³

I

1. On 14th January, 1753, George Berkeley, Bishop of Cloyne, died in Oxford, and was buried shortly afterwards in Christ Church Cathedral. Professors Luce and Jessop, and Messrs. Thos. Nelson, have doubtless had their eyes on the approaching bicentenary of his death in publishing the first four volumes of a new edition of his works, and a new life, as the first installment of a *Bibliotheca Britannica Philosophica* which the firm intends to publish in the course of the next few years.

Hitherto, the standard edition of Berkeley's works has been A. C. Fraser's of 1901, published by the Oxford University Press. The chief differences between the two editions are these. Professors Luce and Jessop give of each text the latest edition published by Berkeley himself, adding all significant variations in any earlier editions in footnotes, whereas Fraser followed no uniform procedure, and sometimes combined different editions. This difference is obviously an improvement. Further, Professor Luce's edition of Berkeley's pair of notebooks, which he calls *Philosophical Commentaries* and which

¹ *The Works of George Berkeley, Bishop of Cloyne*, edited by A. A. Luce and T. E. Jessop, in 8 volumes, Vols. I-IV; and *The Life of George Berkeley*, by A. A. Luce, in one volume; Nelson, London, 1948 onwards, price 30/- each volume.

² *Philosophical Commentaries*, Entry 642, *Works*, Vol. I, p. 78.

³ *Philosophical Commentaries*, Entry 491, *Works*, Vol. I, pp. 61-2.

Fraser called *Commonplace Book of occasional metaphysical thoughts*, differs radically from Fraser's; Professor Luce has also given a different, and better, text of the *Theory of Vision Vindicated*. Finally, Volume II of the new edition amplifies Berkeley's brief correspondence with the American philosopher, Samuel Johnson, since it contains Johnson's letters to Berkeley, in which he questions some points in Berkeley's system, whereas Fraser published Berkeley's replies only. The editors' notes and introductions are brief, and have been written with the primary aim of presenting an accurate text. This policy is welcome, since it remains all too true that, as Professor Jessop remarks, "hitherto Berkeley has been read far too little, and his expositors far too much";⁴ which, in the case of so excellent a writer as Berkeley, is doubly a pity.

The typography and format of the volumes are admirable, and Messrs. Nelson are to be congratulated both on them, and also on undertaking a project at once so considerable and so desirable as their proposed *Bibliotheca Britannica Philosophica*.

Except for *Siris*, which is to appear in Vol. V, and for the moral and political writings, which are to appear in Vol. VI, the four volumes now published contain all those of Berkeley's works that are of philosophic value. And of these, not all stand on an equal footing. *Alciphron* (1732), which occupies Vol. III, is a theological rather than a philosophic piece. The definitive statement of Berkeley's philosophy is to be found, of course, in the *Principles of Human Knowledge*, Part I⁵ (1710), and in the *Three Dialogues* (1713), which are an introduction to, and an amplification of, the *Principles*. Vol. II contains both these works. The relation between them and the *New Theory of Vision* (1709), the *Theory of Vision Vindicated* (1733), the *De Motu* (1721), and the *Analyst* (1734), which are published in Vols. I and IV, is discussed in Section 3, below.

2. Professor Luce's *Life* forms a valuable supplement to the *Works*. For Fraser's *Life and Letters* provides materials for a biography, rather than a biography; moreover, Fraser

⁴ *Works*, Vol. II, p. v.

⁵ The *Principles* was never completed. The MS. of Part II was lost during Berkeley's travels in Italy.

could not avail himself of Berkeley's then undiscovered correspondence with his friend, John Percival, later Earl of Egmont, which, together with the correspondence with his man of affairs, Thomas Prior, constitutes the chief source of information about his life. The composition of this biography has evidently been a labour of love to Professor Luce, but he has kept safely this side idolatry, and has provided an objective and readable account, which will be useful not only to philosophers but to all who are interested in the British Augustan Age.

The portrait of Berkeley which was drawn by his detractors shortly after his death is still extant. It represents him as an impractical idealist with his head in the clouds, who denied the reality of material things, who sailed off to play Don Quixote in America, and who, after the inevitable failure of his crazy plan, retired to lead a Tolstoyan existence at Cloyne, devoting himself to works of dubious goodness, such as forcing upon his flock his pet panacea of tar-water; and as an extravagant metaphysician whose most representative work is his *Siris*, a treatise that begins with tar-water and ends with the Trinity, the intermediate space being occupied with speculations which recall the more improbable passages of the *Timaeus* and the wilder flights of neo-Plotinism.

Professor Luce's biography should finally discredit this caricature. It conveys a vivid impression of the interest and variety of Berkeley's life, which divided naturally into four stages. The first of these was his time as resident Fellow of Trinity College, Dublin, 1707-13. Outwardly, it was unexciting; he appeared to the Percivals as "a sort of monk or recluse in a College"; but philosophically it was the most important period of his life, since it was then that he wrote and published his three chief works. In contrast, the next stage, 1713-20, was the most colourful of his career, being spent among the London wits, and in touring the Continent. The wits made him very welcome; he formed friendships with Pope and Addison, Steele and Swift; and his travels in France and Italy were both extensive and educative. In 1724 he was appointed Dean of Derry, resigned his Fellowship of Trinity, and entered on the third stage of his life by initiating his Bermudan project. This was a missionary enterprise, designed to promote education and

advance Anglican Christianity in North America by establishing St. Paul's College, Bermuda, which was to have been modelled on, and largely staffed from, Trinity College, Dublin. The project was supported by the Society for the Promotion of Christian Knowledge, and Berkeley has expressed the ideal which inspired him in the best-known line of his only poem:

"Westward the Course of Empire takes its Way" ⁶

Professor Luce makes it clear that the sole, but fatal, flaw in the the scheme was the remote Bermudas themselves. Berkeley's mistake lay in not planning to locate the college on the mainland itself. Indeed, it appears that on reaching America he realised his error, and contemplated siting St. Paul's in Rhode Island. Had he seen the wisdom of this before sailing, all would probably have been well; Walpole's misgivings, which as matters stood were not unjustified, would have been allayed, and the money voted by Parliament would have been paid. In the event, Berkeley's biographer has to record the failure of the college, but not of the mission. For, as a result of his three-year sojourn in Rhode Island, Berkeley exercised an important influence on American philosophy and education at a critical juncture.⁷ He formed a friendship with Samuel Johnson, the founding father of American philosophy, whose pupil was Jonathan Edwards, and later corresponded with him both on philosophy⁸ and on the constitution and curriculum of King's College, New York, now Columbia University. He gave books to Harvard, and is commemorated in California. But his closest relation was with Yale, which he regarded as a foster-child replacing the still-born St. Paul's, and where his memory is kept green in many ways. Not long after his return home, he was promoted to Bishop of Cloyne, near Cork, where he spent the remaining eighteen years of his life, except for the visit to Oxford in the course of which he died. He was an excellent

⁶ Berkeley, *America*, 1752.

⁷ B. Rand, *Berkeley's American Sojourn*, Cambridge, Mass., 1932, pp. 66-70, quoted by Luce, *Life*, pp. 144-5.

⁸ "Whoever is versed in the writings of Bishop Berkeley will be sensible that I am in a particular manner beholden to that excellent philosopher." S. Johnson, *Advertisement* to his *Elementa Philosophica*, 1752, quoted by Luce, *Life*, p. 216.

Bishop, who devoted much of his thought and time to improving the material welfare of his diocese by various expedients. Out of his reflections on the causes and possible cures of Irish poverty came the *Querist* (1735-7), in the *Advertisement* to which he makes his apology for meddling in these lay matters:

To feed the hungry and clothe the naked by promoting an honest industry (is) no improper employment for a clergyman who still thinks himself a member of the commonwealth.

His life indicates an exceptional character. Intellectually, he was in the front rank. I estimate his greatness as a philosopher below. This apart, this versatile man was pre-eminent as a theologian and as a classical scholar. The *Analyst*, the *De Motu* and the treatises on vision show him the master, and the acute critic, of the mathematics, mechanics and optics of his age. The *Querist* is regarded by historians of economic theory as an important, and even as a pioneer, work. He concerned himself, especially at Cloyne, with the useful as well as with the fine arts, insomuch that a friend wrote of him:

I scarce remember to have conversed with him on *that art*, liberal or mechanic, of which he knew not more than the ordinary practitioners. With the widest views he descended into minute detail, and begrudged neither pains nor expense for the means of information.

He was an admirable author, and when Lord Chesterfield referred to Swift and Berkeley as the two chief glories of Ireland's Augustan Age, he was voicing the received opinion. Morally, Berkeley has been charged with neglecting his duties by absenteeism, and with being ambitious for preferment.⁹ As to the first charge, it certainly seems odd, by modern standards, that he should have spent the latter eight years of his Trinity Fellowship in London and on the Continent, and odder still that he should have absented himself entirely from his Deanery of Derry, farmed the office out, and applied the proceeds to his Bermudan venture. However, in that age, such practices were not regarded as irregular, and the Bermudan project was, after all, itself a Church mission. As to the second charge, there can be no doubt that Swift exaggerated in describing him as "an

⁹ See G. A. Johnston, *The Development of Berkeley's Philosophy*, London, 1923, pp. 332-5.

absolute philosopher with regard to money, titles, and power." But Berkeley's ambition does not seem to have been immoderate, and he, like many men of his own and other times, would have agreed with his great contemporary on the Bishop's Bench, that we have not merely a right, but a duty, to promote our own happiness as well as other people's.¹⁰ There is also that in his ecclesiastical, political and economic principles which is likely to seem paradoxical to modern eyes. On the one hand, he was of English descent, a kinsman of the great English family, the Berkeleys of Stratton, a dignitary of the Anglican Church, an exponent of the Tory doctrine of Passive Obedience, and a loyal subject of the House of Hanover who raised and equipped a troop of horse at Cloyne during the '45. On the other hand, Professor Luce detects in him at all times a "green strain" of Irish nationalism, more moderate than that in his friend Swift, but not the less real. However, there was actually no inconsistency in Berkeley's position. For his "nationalism" was an economic, and not a political, religious or racial tenet, which expressed itself in wholly reasonable protests against English measures which restricted Irish industry and trade, and in a less reasonable advocacy of economic self-sufficiency for Ireland, the spirit of which is found in an extreme form in his celebrated query (No. 134):

Whether, if there was a wall of brass a thousand cubits high round this Kingdom, our natives might not nevertheless live cleanly and comfortably, till the land, and reap the fruits of it.

It is the more pity that he concluded that the proper answer to the then Mercantilist policy of England was a Mercantilist policy for Ireland, since the value of his economic reflections lies precisely in this, that on important points he anticipated the discoveries of Adam Smith and Ricardo. It might have been hoped that he would have drawn from these promising premisses the true conclusion, that the correct solution for Ireland, and England too, was Free Trade, a conclusion that was in due course both drawn and implemented.

Take him for all in all, Berkeley presents as attractive and admirable a figure as any in philosophy or literature; a figure whose qualities Pope did not exaggerate when he wrote:

¹⁰ See Joseph Butler, *Sermons*, *passim*.

Ev'n in a bishop I can spy desert,
 Secker is decent, Rundel has a heart;
 Manners with candour are to Benson giv'n,
 To Berkeley ev'ry virtue under heav'n.¹¹

3. Logically and psychologically, Berkeley's chief works form a unity. Consider, first, their logical interrelations. In the *Principles* and the *Dialogues* Berkeley's efforts are directed primarily towards establishing the following principles: (1) Abstract Ideas do not exist; (2) Material substances do not exist, and Ideas of sense and hence common things do not exist unperceived; (3) The *esse* of Ideas of sense and hence of common things is *percipi*. The principles are connected, (1) being used as a premiss in one of Berkeley's arguments for (2) and also in one of his three arguments for (3).¹² The *De Motu* and the *Analyst* are essentially critical applications of (1) to some cardinal concepts of Newtonian mathematics and mechanics. For the gist of Berkeley's attack on the concepts of force in general and gravitational force in particular, and on absolute space, time and motion, is that they are Abstract Ideas. The attack on infinitesimals takes a somewhat different form: it is not that they are Abstract Ideas, but that they are altogether unintelligible. It has been supposed that the works on vision are logically independent of the *Principles* and the *Dialogues*; but this is not quite true. Berkeley tells us that the *New Theory of Vision* arose from his elaboration of what seemed, on the face of it, to be an objection to his New Principle:

For that we should in truth see external space, and bodies actually existing in it, some nearer, others farther off, seems to carry with it some opposition to what hath been said, of their existing no where without the mind. The consideration of this difficulty it was, that gave birth to my Essay towards a new Theory of Vision, which was published not long since.¹³

— a passage which prompts the reflection that Berkeley undertook his investigation into the perception of distance, size and space because he took literally the metaphorical form in which his New Principle was often expressed, namely, that common

¹¹ A. Pope, *Epilogue to the Satires*, Dial., ii. 1.70.

¹² See Section 9, below.

¹³ *Principles*, Section 43, *Works*, Vol. II, p. 58.

things do not exist "without the mind";¹⁴ in which case his name must be added to the long list of thinkers who have contributed towards solving one question under the misapprehension that they were answering another. As for the *Theory of Vision Vindicated*, Professor Luce argues,¹⁵ I think plausibly, that Berkeley's reason for returning to the topic of vision after a quarter of a century was, not merely to vindicate his first published work against a critic, but to bring it into line with his completed metaphysic. For, in the *New Theory of Vision*, Berkeley had implied that, whereas the non-tactual "Sensible Qualities" of common things exist only "in the mind," the tactual exist "without" it as well as "within"; i.e., he had taken a position not unlike Locke's, according to which some qualities of common things (the Primary) exist both in minds and without them in "Substrates," whereas others (the Secondary) exist exclusively in minds. In the *Theory of Vision Vindicated*, Berkeley eliminates this radical inconsistency with his mature doctrine, and asserts that all qualities are equally "mind-dependent." Similarly, the earlier essay had implied the possibility that these things, endowed with tactual qualities and existing even when unperceived, are the causes of our sensations, much as Locke had held that certain things, being Substrates endowed with Primary Qualities and existing unperceived, are the causes of our sensations. But the elimination, in the later work, of these "real" things naturally eliminates at the same time their causal function, and Berkeley affirms instead his doctrine that infinite mind, or God, is the sole cause of our sensations.

The psychological unity of these works is equally plain. The *Philosophical Commentaries*, written 1707-8, show that Berkeley was elaborating these three principles and his ideas on vision at the same time; further, the *Principles* and the *New Theory of Vision* are known to have been composed simultaneously. We know, too, that at this time Berkeley projected a general review of human knowledge in the light of these

¹⁴ However, cf. *Third Dialogue*, *Works*, Vol. II, p. 250, where Berkeley shows himself perfectly aware of the metaphorical character of the important phrase "in the mind."

¹⁵ *Works*, Vol. I, pp. 245-8.

principles.¹⁶ This grand design, which reveals the confidence of youth, was naturally not realised, and of the *Principles* themselves only Part I was published. However, we have in the *Analyst* and the *De Motu* excellent specimens of their application to the sciences; and these, together with the all-important statement and proof of the principles themselves, provide us with all we need. I propose, then, to examine (2) and (3), which will necessarily involve consideration of (1) for the reason given above, and will also bring to light the other first principles of his theory of knowledge.

II

4. "Matter exists." The controversy between materialist and immaterialist, or realist and idealist, may naturally be supposed to centre upon this statement, the former asserting and the latter denying it. In fact, the case is less simple. For both of the words in the statement are ambiguous, and the question of its meaning must of course be dealt with before that of its truth or falsity can be considered.

It will be well to consider first the ambiguity of the first word. Berkeley point out that "matter" and "material substance" have two meanings. On the one hand, they are words of common discourse which are synonymous with "material thing," and refer to such things as tables, apples, and trees. On the other, they are philosophic terms of art which are not used in ordinary discourses:

Matter, or material substance, are terms introduced by philosophers . . . but are never used by common people; or if ever, it is to signify the immediate objects of sense.¹⁷

Berkeley, as will appear, has no use for the technical sense, and recommends retaining the words in their vulgar sense only.

Here, then, lies an obvious danger of misunderstanding. Berkeley, who denies that matter (in its philosophic sense) exists, may be thought to deny that matter (in its vulgar sense) exists, and be opposed with arguments designed to prove that,

¹⁶ See Professor Jessop's Introduction to the *Principles*, Works, Vol. II, p. 6.

¹⁷ *Third Dialogue*, Works, Vol. II, p. 261.

in fact, material things do exist. Berkeley warns his readers explicitly against this fallacy:

But above all things you should beware of imposing on your self by that vulgar sophism, which is called *ignoratio elenchi*. You talked often as if you thought I maintained the non-existence of sensible things: whereas in truth no one can be more thoroughly assured of their existence than I am.¹⁸

However, his warnings have been largely vain, and the "coxcombs" who "vanquish Berkeley with a grin"¹⁹ have continued to commit it. This is the *pons asinorum* of Berkeleyan studies, nor is it only coxcombs who have failed to pass it. The most notorious failure was Dr. Johnson's, of whose refutation of Berkeley Boswell gives the following account:

After we came out of the church, we stook talking for some time together of Bishop Berkeley's ingenious sophistry to prove the non-existence of matter, and that every thing in the universe is merely ideal. I observed, that though we are satisfied his doctrine is not true, it is impossible to refute it. I never shall forget the alacrity with which Johnson answered, striking his foot with mighty force against a large stone, till he rebounded from it, "I refute it *thus*." ²⁰

A failure less notorious, but more surprising, was Leibniz':

The man in Ireland who disputes the reality of bodies seems to me neither to give suitable reasons nor to make his meaning sufficiently clear. I suspect that he is one of those who want to get a name by their paradoxes.²¹

The Existence of Substances, and Causation.

5. What Berkeley does deny, then, is the existence of material substances in the philosophic, as opposed to the vulgar, sense:

The only thing whose existence we deny, is that which philosophers call matter or corporal substance. And in doing of this, there is no damage done to the rest of mankind, who, I dare say, will never miss it.²²

¹⁸ *Third Dialogue, Works, Vol. II, p. 260.*

¹⁹ J. Brown, *Essay on Satire occasioned by the death of Mr. Pope*, 1. 224.

²⁰ *Life of Johnson, Globe Edition, Macmillan, London, 1929, p. 162.*

²¹ Letter to Des Bosses, 15th March, 1715, *Opera*, ed. Erdmann, 1840, p. 726a.

²² *Principles, Section 35, Works, Vol. II, p. 55.*

Two of Berkeley's chief purposes are to refute two errors, one of the vulgar, the other of the philosophers. He describes these errors and diagnoses their common sense in the following passage:

...men knowing they perceived several ideas, whereof they themselves were not the authors, as not being excited from within, nor depending on the operation of their wills, this made them maintain, those ideas or objects of perception had an existence independent of, and without the mind, without ever dreaming that a contradiction was involved in those words. But philosophers having plainly seen, that the immediate objects of perception do not exist without the mind, they in some degree corrected the mistake of the vulgar, but at the same time run into another which seems no less absurd, to wit, that there are certain objects really existing without the mind, or having a subsistence distinct from being perceived, of which our ideas are only images or resemblances, imprinted by those objects on the mind. And this notion of the philosophers owes its origin to the same cause with the former, namely their being conscious that they were not the authors of their own sensations, which they evidently knew were imprinted from without, and which therefore must have some cause, distinct from the minds on which they are imprinted.²³

A characteristic of both doctrines is a belief in the unperceived, or "real," existence of non-mental or "unthinking" things. It is to this that Berkeley is fundamentally opposed. He refers to both doctrines as "materialism," and hence to his own criticism of them as his "immaterialism"; they might be called vulgar and philosophic materialism respectively. It will be convenient to consider his refutation of philosophic materialism first. Philosophic materialism, then, asserts the existence of "certain objects," i.e., *material substances*, with the following characteristics: they exist unperceived; they possess Primary Qualities which are "supported" by a Substrate; and they cause sensations to occur in finite minds. Berkeley points out that the reason for the Substrates is the belief that qualities can only exist "in" something; and since the Primary Qualities of material substances do not exist "in" mind since material substances exist unperceived or "without" the minds, Substrates are what they must exist "in."²⁴ In short, the material substances that Berkeley is criticising are those of Locke and Descartes.

²³ *Principles*, Section 56, *Works*, Vol. II, pp. 64-5.

²⁴ *Principles*, Section 73, *Works*, Vol. II, pp. 72-3.

Berkeley tries to refute philosophic materialism, first, by arguments designed to prove that the existence of material substances is impossible, since the concept contains contradictions and a self-contradictory concept cannot refer to anything existent; and second, by an argument designed to prove that, even if their existence were possible, it would still be wholly improbable. Of the first class of arguments, the one by which he sets most store is the following: ²⁵ No sensations ("Ideas of sense") can exist unperceived; and all properties ("Sensible Qualities") are identical with sensations; therefore, no properties can exist unperceived. Hence, the concept of a material substance the properties of which (the Primary Qualities) exist unperceived is self-contradictory, so that material substances cannot exist. This is a strange argument, the strangeness lying in the second premiss. Berkeley tells us that by "Sensible Qualities" he means properties, such as red, round, hard, sweet, etc., and it is surely clear that, this being so, "Sensible Qualities" cannot possibly be *identical with* sensations, as he says they are. It will be necessary to notice this point again when discussing Berkeley's phenomenalism. For the present it will be sufficient to point out that his conclusion, that no properties can exist unperceived, is certainly false. For it is no more improper to say "The trees in the park are tall and green even when no-one is observing them" than it is to say "The trees in the park exist even when no-one is observing them." That is, our notion of the existence of the properties of common things, like our notion of the existence of common things, is that it is continuous and not dependent on their being perceived. This objection therefore falls.

The second of the first class of arguments turns on the famous supposed relativity of properties to the observer, and runs: ²⁶ All properties (Primary Qualities no less than Secondary) are relative to the observer; therefore no properties can exist unperceived; hence again, the concept of a material substance the properties of which exist unperceived is self-contradictory, so that material substances cannot exist. My criticism of this argument is that it is a *non sequitur*. If all I know about

²⁵ *Principles*, Sections 7 and 22-4, *Works*, Vol. II, pp. 43-4 and 50-1.

²⁶ *Principles*, Sections 14-5, *Works*, Vol. II, pp. 46-7.

the shape of a certain lawn is that one observer says that it is circular and that another says that it is gibbous, I conclude that at least one of them is wrong. But I do not conclude that the lawn has no definite shape; I conclude that, although it has one, I do not know what it is. Still less do I conclude that it only has that shape when someone is observing it. The philosophic materialists' notion of the figure and other Primary Qualities of a material substance is similar to the common notion of those of a common thing, such as a lawn, and no more open to Berkeley's objection. Indeed, Berkeley himself anticipates the reply to this objection of his:

...it must be confessed this method of arguing doth not so much prove that there is no extension or colour in an outward object, as that we do not know by sense which is the true extension or colour of the object.²⁷

The last of the first class of arguments that I propose to consider turns on the impossibility of Abstract Ideas.²⁸ It goes: The philosophers themselves point out that Secondary Qualities (but not Primary) cannot exist unperceived because they are relative to the observer; but Primary Qualities cannot be separated, or "abstracted," from Secondary, for that a thing should be, e.g., extended but not coloured is "inconceivable," therefore Primary Qualities too cannot exist unperceived; hence, once again, the concept of a material substance the properties of which (Primary Qualities) exist unperceived is self-contradictory, so that material substances cannot exist. I think that this objection can be met in two ways. First, by using my reply to the preceding objection against the first premiss, that Secondary Qualities cannot exist unperceived because they are relative to the observer. And second, by pointing out that the word "inconceivable" in the second premiss is ambiguous as between psychological and logical impossibility. Berkeley points out, what seems to be true, that we cannot form a visual image of a thing which has shape but no colour. Such a thing is therefore "inconceivable," in the sense of "unimaginable." But what Berkeley thinks he has proved is that such a thing is "inconceivable" in the sense of "self-contradictory." This, however, does not seem

²⁷ *Principles*, Section 15, *Works*, Vol. II, p. 47.

²⁸ *Principles*, Section 10, *Works*, Vol. II, p. 45.

to be true, for there is not, I suggest, any impropriety in saying "So-and-so is extended but not coloured." Consequently, the concept of a material substance is not in fact self-contradictory. Berkeley's tendency to confuse these two meanings of "inconceivable" is an important matter, as will be seen when his attack on Abstract Ideas is examined more fully.

It seems, then, that Berkeley is wrong in saying that the existence of the philosophers' material substances is impossible: it remains to consider his argument that, even if their existence is possible, it is nevertheless altogether improbable.

This argument is as follows:²⁹ We are to believe that material substances exist. We cannot know this by observation, since we are told that these things exist unperceived. Hence, the only kind of reason we can have for asserting their existence is that it is a probable hypothesis, which satisfactorily explains certain facts for which we require an explanation. Now, the fact which material substances are supposed to explain is the occurrence of sensations in finite minds, since they are said to "cause" these. But in fact they do not provide a satisfactory explanation at all, since their patrons

own themselves unable to comprehend in what manner body can act upon spirit, or how it is possible it should imprint any idea in the mind.³⁰

It is evident that this argument turns on the concepts of causation and explanation, and it will therefore be convenient to criticise it in connexion with an examination of the notion of causation that was common to both "the philosophers" and their critic, Berkeley.³¹

6. Mental substances, or minds, or spirits, Berkeley does believe to exist. He distinguishes two species: finite minds, which are those of men and angels; and infinite mind, which is God. It is commonly said that Hume disproved the existence of Berkeley's mental substances by pointing out that it is open to the same objection as Berkeley had brought against the existence of material substances. But Berkeley anticipates this objec-

²⁹ *Principles*, Sections 18-20, *Works*, Vol. II, pp. 48-9.

³⁰ *Principles*, Section 19, *Works*, Vol. II, p. 49.

³¹ See Section 7, below.

tion in a passage³² in which he claims that the two cases are quite different. For the existence of minds is not impossible, since the concept of a mental substance contains no contradictions; and further we have evidence for it which, in the case of our own minds and of God, is conclusive, and in that of other men's minds is probable.

Specifically, we know for certain that we ourselves exist "immediately" and "by reflexion," and we know that it is probable that other men's minds exist by inductive argument. Knowing that certain things and events have been produced by myself (since I have immediate knowledge of the existence and actions of my own mind), when I observe things and events of the same sorts I infer that they have been produced by finite minds like my own.³³

Berkeley offers two proofs of the existence of infinite mind. The first turns on the continuity of the existence of common things, and runs as follows:

Common things exist when, and only when, they are perceived by a mind (1);

Common things exist when unperceived by a finite mind (2);

Therefore, common things are perceived by an infinite mind, namely God, who therefore exists.³⁴

Premiss (1) is Berkeley's New Principle. The truth of premiss (2) derives from the undoubted fact that we can perfectly well say "There is a tree in the Quad although no man is perceiving it," or in other words from the fact that our notion of the "external world" is that it exists independently of being perceived by any human being. I have two criticisms of this argu-

³² *Third Dialogue, Works*, Vol. II, pp. 232-4.

³³ *Principles*, Section 145, *Works*, Vol. II, p. 107. I do not dwell on these arguments because Berkeley does not develop them. The reason for this is that spirits were to have been treated of in the lost Part II of the *Principles*.

³⁴ *Second Dialogue, Works*, Vol. II, pp. 212-5. In this passage, Berkeley goes on to point out that his doctrine, that common things are perceived by God, must not be confused with that of Malebranche, that "we see all things in God." On Berkeley's relation to Malebranche, see the works referred to by Professor Jessop at *Works*, Vol. II, p. 154, note 2; also A. D. Fritz, *Malebranche and the Immaterialism of Berkeley*, this *Review*, Vol. III, No. 1, pp. 59-80.

ment. First, premiss (1), the New Principle, is false, as will be shown below. Second, the argument is circular. For, whereas in this passage the thesis that common things exist when unperceived by a finite mind is used as a premiss to prove that they are perceived by an infinite mind, elsewhere Berkeley uses the thesis that common things are perceived by an infinite mind as a premiss to prove that they exist when unperceived by a finite mind.

The second proof turns on the causation of our sensations.³⁵ There must be a cause of the occurrence of sensations in finite minds. To be a cause means to be an agent which produces things by the exercise of power. It follows that common things cannot be the causes of our sensations, for common things are collections of sensations ("Ideas of sense"), and Ideas are passive, since no "power or activity" can be discovered in them by inspection. The universal conviction that they are causes is a vulgar error:

...when we perceive certain ideas of sense constantly followed by other ideas, and we know this is not of our doing, we forthwith attribute power and agency to the ideas themselves, and make one the cause of another, than which nothing can be more absurd and unintelligible.³⁶

No more can unobservable things be the causes of sensations, as the "corpuscular philosophy" pretends; for corpuscles, like all the unobservable things that figure in transcendent hypotheses, are also simply collections of Ideas (presumably, of imagination as opposed to sense), and hence cannot be causes for the same reason as common things cannot.³⁷ The cause must therefore be a substance, for only substances are active. Now, it cannot be a material substance, for these have been

³⁵ *Principles*, Sections 25-33, *Works*, Vol. II, pp. 51-5.

³⁶ *Principles*, Section 32, *Works*, Vol. II, p. 54.

³⁷ See also *Principles*, Section 50, *Works*, Vol. II, p. 62. The reference is to Newton's system of the world, with which Berkeley was well acquainted, as the *Principles* amply shows. The name "transcendent hypothesis" is due to Mr. William Kneale. See his discussion of transcendent hypotheses and of the existence of unobservable things in his *Probability and Induction*, Oxford, 1949, Part II, §§ 19 and 20; and also his article, "The Notion of a Substance," *Proceedings of the Aristotelian Society*, New Series, Vol. XL, London, 1940.

proved not to exist. And it cannot be a finite mental substance, for the activity of a mind consists in willing; but the occurrence of sensations is independent of our wills. *E.g.*, I cannot now see St. Paul's Cathedral (as distinct from imagining it) just by wishing to do so; and when I stub my toe against my bed in the dark I have a sensation which I do not wish to have. Hence, by elimination, the cause can only be an infinite mental substance, Who therefore exists. Moreover, this infinite spirit can be inferred to be benevolent, since He evidently causes our sensations to occur regularly, so that men can avoid harm and acquire dominion over Nature by discovering the rules according to which they occur.

There are a number of points at which this argument could be attacked. But the fundamental objection to it, as to Berkeley's argument to show that the existence of material substances is not probable, turns on the concepts of causation and explanation, so that it is desirable to examine both arguments in this setting.

7. Berkeley's account of the meaning of "X is the cause of Y," or "Y, because X," is that this is correctly said when, and only when, X is an "efficient" cause, *i.e.*, an agent which produces Y by an exercise of power. He explicitly rejects the alternative account, which is implicit in ordinary discourse, that it is correctly said when, and only when, things or events like X are regularly connected with things or events like Y as concomitants or antecedents. He says that this latter relation, which he admits is called by the vulgar "cause/effect," is really a different one, namely sign/*significatum*:

...the connexion of ideas does not imply the relation of *cause* and *effect*, but only that of the mark or sign with the thing *signified*. The fire which I see is not the cause of the pain I suffer upon my approaching it, but the mark that forewarns me of it.³⁸

The total system of sensations and their uniform relations (*i.e.*, Nature) which God produces in men's minds thus constitutes a Divine Language, of which stable collections of sensations (*i.e.*, common things) are the words, and the uniform relations (*i.e.*, natural laws) are the semantic rules:

³⁸ *Principles*, Section 65, *Works*, Vol. II, p. 69.

And it is the searching after, and endeavouring to understand those signs instituted by the Author of Nature, that ought to be the employment of the natural philosopher, and not the pretending to explain things by corporeal causes; which doctrine seems to have too much estranged the minds of men from that active principle, that supreme and wise spirit, *in whom we live, move, and have our being.*³⁹

In short, the proper study of the authors of *Nature* is the interpretation of the Book of the Author of Nature. Accordingly, Berkeley holds that such a question as "Why did Red move from bottom spot?" is not properly answered by "Because White struck it," for this is an explanation in terms of an (unexpressed) statement of regular connexion, namely, "Whenever one billiard ball strikes another in such-and-such a way under conditions so-and-so, the second ball moves." Rather, it is properly answered in terms of the ulterior cause, which is the efficient agent which produces all such regularities. Further, since Berkeley is a phenomenalist who holds that all statements about common things, and hence all laws and empirical generalisations, are reducible to statements about sensations, he holds that this question, and indeed any other such causal question, is properly answered by naming the efficient cause which produces sensations regularly in finite minds. Finally, Berkeley's view of what sorts of things can, and cannot, correctly be said to be causes follows from this conception of what "Y, because X" means. Common things and Newton's corpuscles are eliminated because, being merely collections of "passive" Ideas, they cannot be efficient causes, which must be "active." Finite minds are eliminated because, although active (being substances), the occurrence of sensations is in fact evidently independent of their activity, which is volition. This leaves material substances and infinite mental substance. But material substances fail to qualify, since their patrons are unable to provide an intelligible account of how they act upon minds so as to produce sensations; their existence is therefore wholly improbable, even if it is not impossible. Which leaves God, Who therefore exists.

My criticism of all this is essentially that both Berkeley and the patrons of material substances have an incorrect notion

³⁹ *Principles*, Section 66, *Works*, Vol. II, pp. 69-70.

of the meaning of "Y, because X," and that the falsity of both theories follows from this fact. As Hume was to show, regularity, not "efficiency," is the correct account of the meaning of "cause/effect." We say "Y, because X" when things or events like X are regularly connected with things or events like Y, not when X produces Y by the exercise of some mysterious "power."⁴⁰ Further, Berkeley's ingenious concept of the Divine Language is paradoxical, as common sense recognises it to be. The paradox consists in this, that the word "language" is applicable only to systems of signs in which the sign/*significatum* relation is artificial or conventional, and never to systems in which this relation is natural. Its source may confidently be surmised to lie in a familiar ambiguity in the words "mean" and "signify." That is, Berkeley confuses

"Defective brakes mean (i.e., are a cause of, or a sign of) accidents." with

"'Defective brakes' means (i.e., is a sign for) defective brakes."

The second statement may correctly be said to be about a language; specifically, it states a semantic rule of the English language. But the first statement cannot correctly be said to be about any language, not even God's. "There will not be books in the running brooks until the dawn of hydro-semantics."⁴¹ Finally, it is true and important that scientists attempt to explain empirical laws by means of transcendent hypotheses asserting the existence of unobserved, or more precisely, unobservable things; and that when the hypothesis provides an acceptable explanation, these things are said probably to exist. But the point is that here again the concept of causation involved is not efficiency, but regularity. Scientists do not hold that their transcendent objects (corpuscles in Berkeley's day, electrons, genes, etc., in ours) *produce* empirical laws: what they claim is that the statements of the theories which formulate the regular relations between the transcendent objects *entail* empirical laws.

Hence the equally paradoxical character of Berkeley's statements about what sorts of things are properly said to be

⁴⁰ *Treatise of Human Nature*, Book I, Part III, Section XIV.

⁴¹ J. L. Austin, in a symposium on "Truth," *Aristotelian Society Supplementary Volume XXIV*, London, 1950, p. 120, note.

"causes." For, as he recognises, common things and events are just what are called "causes" in everyday life, and electrons, etc., are what are called "causes" in scientific discourse; whereas the common man never says that Red moved from bottom spot because God made it do so, and the physicist never says that the reason for the observed laws which describe the behaviour of gross bodies upon impact is the will of God. Berkeley replies to this objection with a celebrated maxim:

... in such things we ought to *think with the learned, and speak with the vulgar*.⁴²

That is, he recommends that we should continue to speak of common things as "causes" although we know that really they are not, in the same way as we continue to speak of the sun "rising" although we know that really it does not. This reply raises a nice point of philosophic method, and it is incumbent on those of us who believe that philosophic questions are answered by an appeal to ordinary language to deal with it. Berkeley's point, I believe, is this. "I, Berkeley, say that it is false that, e.g., Red moved because White struck it. You, my critic, object that we ordinarily say that Red moved because White struck it. But I reply to your objection that we say many many things which are not true, e.g., that the sun rose this morning; hence, the fact that we say that White's striking it was the cause of Red's moving does not disprove my thesis that it was not." The correct counter-objection to Berkeley's reply is, I think, that the cases are not analogous, as the following dialogue between a philosopher and a common speaker shows:

P. "Would you say that, strictly speaking, White's striking it was the *cause* of Red's moving?"

C.S. "Why certainly; what else?"

P. "And would you say that, strictly speaking, the sun rose this morning?"

C.S. "Why no, strictly speaking, of course not."

The "ordinary language" to which philosophy must appeal cannot include what is known to be literally false or to be

⁴² *Principles*, Section 51, *Works*, Vol. II, p. 62. See also Professor Jessop's note 2 at this page on the history of this maxim.

metaphorical. Otherwise we might, e.g., find ourselves forced to concede that France is indeed a woman since we usually talk of it as if it were.

It remains to apply these considerations to the questions of the existence of material substances and of infinite mental substance. Briefly, I think that Berkeley is right in contending that the existence of Locke's unobserved material substances is improbable, but that his objection, that the philosophers do not make it intelligible how material substances "act upon" minds so as to produce sensations, is not the fundamental one. This is rather that the theory does not meet the essential requirements of any acceptable transcendent hypothesis; namely, that it should be consistent with observed laws, and enable new ones to be deduced. For Locke does not provide any principles formulating the relations between his material substances that will meet these requirements. And the underlying reason for this is that he is addressing himself to the wrong question, namely, "What produces, or is the efficient cause of, sensations?" rather than to the right question, namely, "What will explain (entail) observed regularities between common things?" This is the essential difference between his material substances and Newton's corpuscles or modern physicists' electrons. But, finally, Berkeley's God is open to just the same sort of objections for the same underlying reason. In general terms, there is evidently not much to choose between the suppositions that empirical laws are the results of the activity of, on the one hand, unobserved material substances, and, on the other, an unobservable mental substance. For what the objection about the nature of the interaction is worth, it is no more comprehensible how Berkeley's God "impresses" sensations on our minds than how Locke's material substances do so. The objection from the failure to meet the essential requirements of any transcendent hypothesis, however, is slightly different. For Berkeley, unlike Locke, does provide an account of how his substance operates. His theory is that God's production of regularities in Nature (*i.e.*, among our sensations) is determined by His benevolent purpose of enabling His creatures to avoid harm and to acquire dominion over Nature; hence, his notion of causation turns out ultimately to be "final" as well as "effi-

cient." But, first, the theory does not square with the facts. Why, on this view, should it be so difficult for us to discover certain connexions between phenomena which affect our welfare vitally, such as the cause of cancer? Would not a benevolent God make such connexions transparently obvious to us? And second, it is plain that the theory is equally unacceptable in its directive aspect. For it entails that whenever, in the future, we find an association or correlation that is stable over a mere two or three instances, we shall be justified in concluding that we have discovered a law of Nature. I conclude, therefore, that the existence of Berkeley's God is as improbable as that of Locke's material substances.

The fact that the type of explanation Berkeley favours is teleological has caused his philosophy to be called anti-scientific.⁴³ How far is this charge justified? Berkeley's position, as I understand it, is as follows:⁴⁴ He is not opposed to the induction of empirical laws by observation and experiment, but he does maintain that these must be explained by God's will and purpose rather than by transcendent hypotheses of the mechanical type, such as Newton's. Berkeley's position is therefore not wholly anti-scientific; but it must be conceded that, since it is precisely the characteristic of the sciences in their advanced development to proceed by the deductive employment of transcendent hypotheses rather than by the induction of empirical laws, Peirce's criticism is on the whole justified.⁴⁵

The chief consequence that Berkeley draws from his proof of the non-existence of material substances is that there is now no ground for scepticism of the senses, since it is philosophic materialism which is the sole cause of this scepticism:

This (*i.e.*, philosophic materialism) which, if I mistake not, hath been shewn to be a most groundless and absurd notion, is the very root of scepticism; for so long as men thought that real things subsisted without the mind, and that their knowledge was only so far forth real as it was conformable to real things, it follows, they could not

⁴³ Peirce makes this criticism in his review, "Fraser's Works of Bishop Berkeley," *North American Review*, Vol. CXIII, p. 468, Boston, October, 1871.

⁴⁴ *Principles*, Sections 107 and 109, *Works*, Vol. II, pp. 87-8 and 89.

⁴⁵ Compare also the second passage quoted in the present Section.

be certain that they had any real knowledge at all. For how can it be known, that the things which are perceived, are conformable to those which are not perceived, or exist without the mind? ⁴⁶

Evidently, then, if material substances do not exist, there is no occasion for scepticism. But Berkeley also attacks the position by an argument based on an analysis of the meaning of the word "real." The philosophic materialists contend that their unperceived material substances are the only real things other than minds. Berkeley objects that their thesis is meaningless, "repugnant" or "contradictory," because attention to the way the word "real" is used shows that the only "unthinking things" (i.e., things other than minds) to which "real" is properly applied are perceived things, so that "real unperceived thing" is an impossible expression. Specifically, he contends that "real" is used to distinguish perceived unthinking things, (i.e., common things) from the unthinking things that are imagined or remembered (i.e., private images), these latter being the things that are properly called "unreal." Real or perceived things are distinguished from unreal things or images by the difference of their properties and relations:

The ideas imprinted on the senses by the Author of Nature are called *real things*: and those excited in the imagination being less regular, vivid and constant, are more properly termed *ideas*, or *images of things*, which they copy and represent. But then our sensations, be they never so vivid and distinct, are nevertheless ideas, that is, they exist in the mind, or are perceived by it, as truly as the ideas of its own framing. The ideas of sense are allowed to have more reality in them, that is, to be more strong, orderly, and coherent than the creatures of the mind; but this is no argument that they exist without the mind.⁴⁷

And in this sense, the sun that I see by day is the real sun, and that which I imagine by night is the idea of the former. In the sense here given of *reality*, it is evident that every vegetable, star, mineral, and in general each part of the mundane system is as much a *real being* by our principles as by any other. Whether others mean any thing by the term *reality* different from what I do, I entreat them to look into their own thoughts and see.⁴⁸

⁴⁶ *Principles*, Section 86, *Works*, Vol. II, p. 78. Cf. the conclusion of the *Third Dialogue*, *Works*, Vol. II, pp. 262-3.

⁴⁷ *Principles*, Section 33, *Works*, Vol. II, p. 54.

⁴⁸ *Principles*, Section 36, *Works*, Vol. II, p. 56.

This argument must be criticised by taking up the challenge in Berkeley's last sentence, with the difference that what is needful is not "to look into our own thoughts" but rather to examine the use of "real." First, we of course call "real" certain "unthinking things" that are not *perceived* but are *perceptible*. But setting aside this objection, which will be discussed later, it is also true that we call "real" certain unthinking things that are *imperceptible*, one important class of which is the entities of acceptable transcendent hypotheses,⁴⁹ as has been fully shown. Our reason for saying that Locke's archetypes are "unreal" is not, as Berkeley suggests, that they are unperceived, but that their existence is an improbable supposition. Nor is Berkeley right in saying that belief in the reality of unperceived things necessarily implies scepticism of the senses. For we say that, e.g., electrons are real, yet we are not on that account sceptical of our senses. The explanation is, I submit, that the feature of Locke's doctrine that entails scepticism is not, as Berkeley says, the assertion that unobserved things exist, but the doctrine that "knowledge" is "only so far forth *real* as it (is) conformable to *real things*" which are never observed. On Locke's view, we can know that the tree in the Quad is tall and green when, and only when, we know the corresponding truth about the "real tree" (i.e., the positions, motions, etc., of the material substances which constitute the "real tree"); but we never do know the latter, since the substances are unobserved; hence we never know the former either. But we are not sceptical of our senses because we do not accept this account of the way in which the statement "The tree in the Quad is tall and green" is verified. For we recognise that this statement is verified by, and only by, our seeing that it is so, and not by our first observing that it is so, and then verifying our observation by checking it against the corresponding statement in the language of physics about what the physicists call "the real tree" (i.e., against a statement about a congeries of electrons).

There is one further point to add. It is plain from his second proof of the existence of God that Berkeley holds that

⁴⁹ Others are, e.g., transcendental numbers and nationalism.

the existence of sensations, and hence of common things, is "mind-dependent" in the sense of being *causally* dependent on infinite mind. It will be necessary later to distinguish this from another sense, namely the *logical*, in which the existence of common things is, in Berkeley's view, "mind-dependent." This second sense is in fact implicit in his first proof of the existence of God.

The Existence of Sensible Things.

8. Berkeley's explication of the meaning of existential statements about what he calls "sensible things" (i.e., common things), which turns on his New Principle, has always and rightly been regarded as the most important feature of his philosophy: that it was so regarded by himself also is witnessed by the second quotation at the head of this essay. He reveals his awareness of the importance of this question in another passage, which might well serve as a prolegomenon to any future metaphysic:

Nothing seems of more importance, towards erecting a firm system of sound and real knowledge, which may be proof against the assaults of scepticism, than to lay the beginning in a distinct explication of what is meant by *thing*, *reality*, *existence*: for in vain shall we dispute concerning the real existence of things, or pretend to any knowledge thereof, so long as we have not fixed the meaning of those words.⁵⁰

Consider again the statement, "Matter exists."⁵¹ It may be thought that, having indicated the ambiguity in the first word, all is now clear, and that the position is that there is a straight conflict about the truth of the statement, "Material things exist," the vulgar materialists or realists asserting it, and Berkeley denying it. But again the case is not so simple, for the ambiguity of the second word has now to be reckoned with. Thus, consider, e.g., the statement "The tree in the Quad is a real thing." This may mean either: (1) "The tree in the Quad is a thing that exists"; or (2) "The tree in the Quad is a thing that exists even when it is not perceived." What Berkeley denies is (2), not (1). He is criticising, not the *existence* of material (or, more generally, common) things, but the species of existence affirmed of them by the vulgar materialists, *unper-*

⁵⁰ *Principles*, Section 89, *Works*, Vol. II, p. 79.

⁵¹ Cf. the beginning of Section 4, above.

ceived existence, existence "without the mind," or "real existence." Here, then, is another opportunity for an *ignoratio elenchi*; Berkeley, who denies (2), may be thought to deny (1). And there can be little doubt that this ambiguity has contributed quite as much to the misunderstanding of his position as the ambiguity in "matter."

Berkeley's reason for denying (2) is his New Principle, according to which (as will shortly be made plain) "The tree in the Quad (and, generally, any common thing) exists" is true when, and only when, "The tree in the Quad is perceived" is true. This principle is evidently the contradictory of (2), so that in proving his New Principle Berkeley is simultaneously disproving vulgar materialism.⁵²

However, it is pertinent to ask whether Berkeley's view of the issue between himself and the vulgar materialists is really correct. On examination, it is found not to be. The proposition that Berkeley imputes to them is "Common things exist even when not perceived." But I suggest that what we vulgar maintain is (a) "Common things exist even when not perceived *by any man* (or, as Berkeley would say, by any finite mind)," and not (b) "Common things exist even when not perceived *by any man, angel or God* (i.e., by any mind, finite or infinite)." Now in fact Berkeley's New Principle is the contradictory of (b), not of (a). Indeed, he accepts the truth of (a), holding that common things are perceived continuously by God and discontinuously by men, so that their existence is continuous. In short, in the only sense which really matters, Berkeley is a "realist" or "materialist," and there is no opposition between him and common sense.⁵³

The second question of meaning to be clarified is: Of what exactly is the New Principle asserted? The answer is: Of what Berkeley calls "sensible things"; but bearing in mind his warning of the importance of explicating the meaning of "thing," it will be well to elucidate this point. Berkeley divides

⁵² Vulgar is distinguished from philosophic materialism, or realism, at the beginning of Section 5, above.

⁵³ Cf. J. Laird "Berkeley's Realism," *Mind*, Vol. XXV, London, 1916; and F. J. E. Woodbridge, "Berkeley's Realism," in *Studies in the History of Ideas*, Columbia University, New York, 1918.

things into (1) thinking things (i.e., minds), which are the only "substances"; and (2) "unthinking things" (i.e., "Ideas"), which are not "substances" but "objects of knowledge." He subdivides class (2) into (2.1) unperceived unthinking things (i.e., "Ideas of memory and imagination"), which are private images, such as my auditory memory-image of a recital by Mr. Casals, my visual imagination-image of the summit of Mount Everest; and (2.2) perceived unthinking things (i.e., "Ideas of sense or sensations," otherwise "Sensible Qualities"). Finally, class (2.2) is divided into: (2.21) material perceived unthinking things, such as tables, stones and trees; and (2.22) immaterial perceived unthinking things, such as noises, smells and shadows. By "sensible things" Berkeley understands (2.21) and (2.22) together. He adds that these are both "collections" of Ideas of sense, this being his phenomenalist principle. It should be noted further that (2.21) and (2.22) differ from (2.1) in being common as opposed to private things, and that the *differentia* between (2.21) and (2.22) has generally been taken since the time of Locke to be tangibility or inertia; e.g., the difference between touching a tree and touching the place where there is a shadow of a tree. In this essay I refer to Berkeley's "sensible things," classes (2.21) and (2.22), as "common things" throughout, and to his class (2.2) generally as "sensations," sometimes as "Ideas of sense."

Berkeley asserts "*esse is percipi*" of the whole of class (2.2), common things. Of this, the most important sub-class is (2.21) material common things; nevertheless it is only a sub-class. As evidence that Berkeley intends his principle to cover (2.22), immaterial common things, as well, consider:

There was an odour, that is, it was smelled; there was a sound, that is to say, it was heard; a colour or figure, and it was perceived by sight or touch.⁵⁴

The existence of private images he naturally holds to consist in being remembered or imagined. As for thinking things, he states that their *esse* is *percipere*. I shall deal with this principle briefly, for reasons previously given.⁵⁵ In general terms, it must be interpreted and criticised on the same lines as the New

⁵⁴ *Principles*, Section 3, *Works*, Vol. II, p. 42.

⁵⁵ See note 33, above.

Principle for common things. Thus, it must be taken to mean that "Tom Jones (and, generally, any mind or spirit) exists" is true when, and only when, "Tom Jones is perceiving something" is true. The objection to this is that it is patently false; we do not say, e.g., that Tom Jones ceases to exist when he goes to sleep and comes into existence again when he wakes up. If, on the other hand, Berkeley had said that the *esse* of minds is, not *percipere*, but *percipere posse*, then I think he would have said something important and possibly true. Even so, to make the principle really plausible, it is necessary to distinguish (as I shall shortly show that Berkeley does not) perception from sensation. For we say, e.g., that the tree in the Quad has sensitivity, but we do not say that it has a mind.

The third question of meaning is: How is the statement "The *esse* of common things is *percipi*," otherwise "For common things, to be real or existent is to be perceived" to be interpreted? The answer to this question turns on yet another ambiguity, this time in the word "is." Specifically, there are two ways in which it may be interpreted. First, it may be thought to be a statement of the same logical type as "For human actions, to be eleemosynary is to be charitable." That is, it may be thought that the New Principle asserts that "existent or real" is a name for the same property as "perceived" and consequently refers to the same things, so that "perceived" is a familiar type of definition of "existent or real," just as "charitable" is of "eleemosynary." Or, second, the New Principle may be thought to be a statement of the same logical type as "For all plane triangles, to be equilateral is to be equiangular." That is, it may be thought that "existent or real" refers to the same things as "perceived" but is not a name for the same property any more than "equiangularity" is a name for the same property as "equilaterality". In this case, being perceived will be the necessary and sufficient condition, the test, or (as I shall call it, following recent discussions in ethics) the "ground" of being real, but not the definition of being real.⁵⁶

⁵⁶ Philosophers have tended to confuse these two different relations of definition and ground. It may seem tempting to explain the difference between the two interpretations by saying that the first asserts that "perceived" means the same thing as "existent" whereas the second does not.

Of these two possible interpretations, there can be no doubt that it is the second which is correct, since it would be paradoxical to maintain that "perceived" and "existent or real" are names for one and the same property — if, indeed, existence can be called a "property." I submit that the following passage indicates pretty clearly that Berkeley rejected the first interpretation:

HYLAS. But do you in earnest think, the real existence of sensible things consists in their being actually perceived? If so: how comes it that all mankind distinguish between them? Ask the first man you meet, and he shall tell you, *to be perceived* is one thing, and *to exist* is another.

PHILONOUS. I am content, Hylas, to appeal to the common sense of the world for the truth of my notion. Ask the gardener, why he thinks yonder cherry-tree exists in the garden, and he shall tell you, because he sees and feels it; in a word, because he perceives it by his senses. Ask him, why he thinks an orange-tree not to be there, and he shall tell you, because he does not perceive it.⁵⁷

Philonous' (i.e., Berkeley's) reply shows that he regards the fact that the tree is perceived as the reason, or ground, for the fact that (we say that) the tree exists. That Berkeley accepts

But the proposed elucidation would actually be an *obscurum per obscurius*, since "mean the same thing" does not always mean the same thing. It may mean "name the same property and hence refer to the same thing," or "refer to the same thing" merely. In the second sense, but not in the first, the second interpretation does assert that "perceived" means the same thing as "existent." On the second interpretation, the relation between "The tree in the Quad is real" and "The tree in the Quad is perceived" is at least that of mutual material implication or material equivalence. In fact, I think that it is something more, namely, mutual entailment or what might be called necessary equivalence. That is, the truth/falsity relation in question holds necessarily in virtue of the statements' meanings, and not merely in fact. Equiangularity and equilaterality also illustrate necessary equivalence. An example of material equivalence, to bring out the distinction, is the relation of "To-day is Wednesday" to "To-day I play golf," given that I play golf always and only on Wednesdays.

⁵⁷ *Third Dialogue, Works*, Vol. II, p. 234. In his paper, "The Refutation of Idealism," Professor Moore examines the meaning of "*esse is percipi*" and rejects the first interpretation, that Berkeley is offering "perceived" as a definition of "existent," on the ground that this would be absurd. But he does not make it plain what Berkeley did think was the relation between the two words. See G. E. Moore, *Philosophical Studies*, pp. 8 ff., London, 1922.

the second interpretation is conclusively shown by his third proof of his New Principle which, as will appear, turns entirely on the impossibility of, or the "contradiction" in, the expressions "existent but not perceived" and "perceived but not existent," the tendency of which argument can obviously only be to demonstrate the necessary equivalence of the two words.

The final question of meaning to be elucidated is whether Berkeley maintains that the ground of the existence of common things is their being perceived or their being perceptible. Doubt on the point arises from the inconsistency of his own words, of which there can be no question. He does not seem to have appreciated the importance of this distinction. Thus within the same Section he writes both:

For as to what is said of the absolute existence of unthinking things without any relation to their being perceived, that seems perfectly unintelligible. Their *esse* is *percipi*, nor is it possible they should have any existence, out of the minds or thinking things which perceive them.

and also:

The table I write on, I say, exists, that is, I see and feel it; and if I were out of my study I should say it existed, meaning thereby that if I was in my study I might perceive it, or that some other spirit actually does perceive it.⁵⁸

However, I am satisfied that actual, not possible, perception is what Berkeley really intends, for two reasons. First, it is what he usually says, as witness, notably, the formulation of the New Principle itself, which explicitly states that the existence of ideas of sense and hence common things consists in being perceived, not in being perceptible.⁵⁹ Second, his first proof of the existence of God, if it is to be valid, requires for first premiss the New Principle formulated in terms of actual rather than possible perception.⁶⁰ For, if for premiss (1) in that argument there is substituted:

⁵⁸ *Principles*, Section 3, *Works*, Vol. II, p. 42. Cf. *Principles*, Section 58, the same, pp. 65-6.

⁵⁹ Cf. the corresponding distinction made earlier in this section between saying that the *esse* of spirits is *percipere* and that their *esse* is *percipere posse*.

⁶⁰ See Section 6, above.

Common things exist when, and only when, they are perceptible by a mind

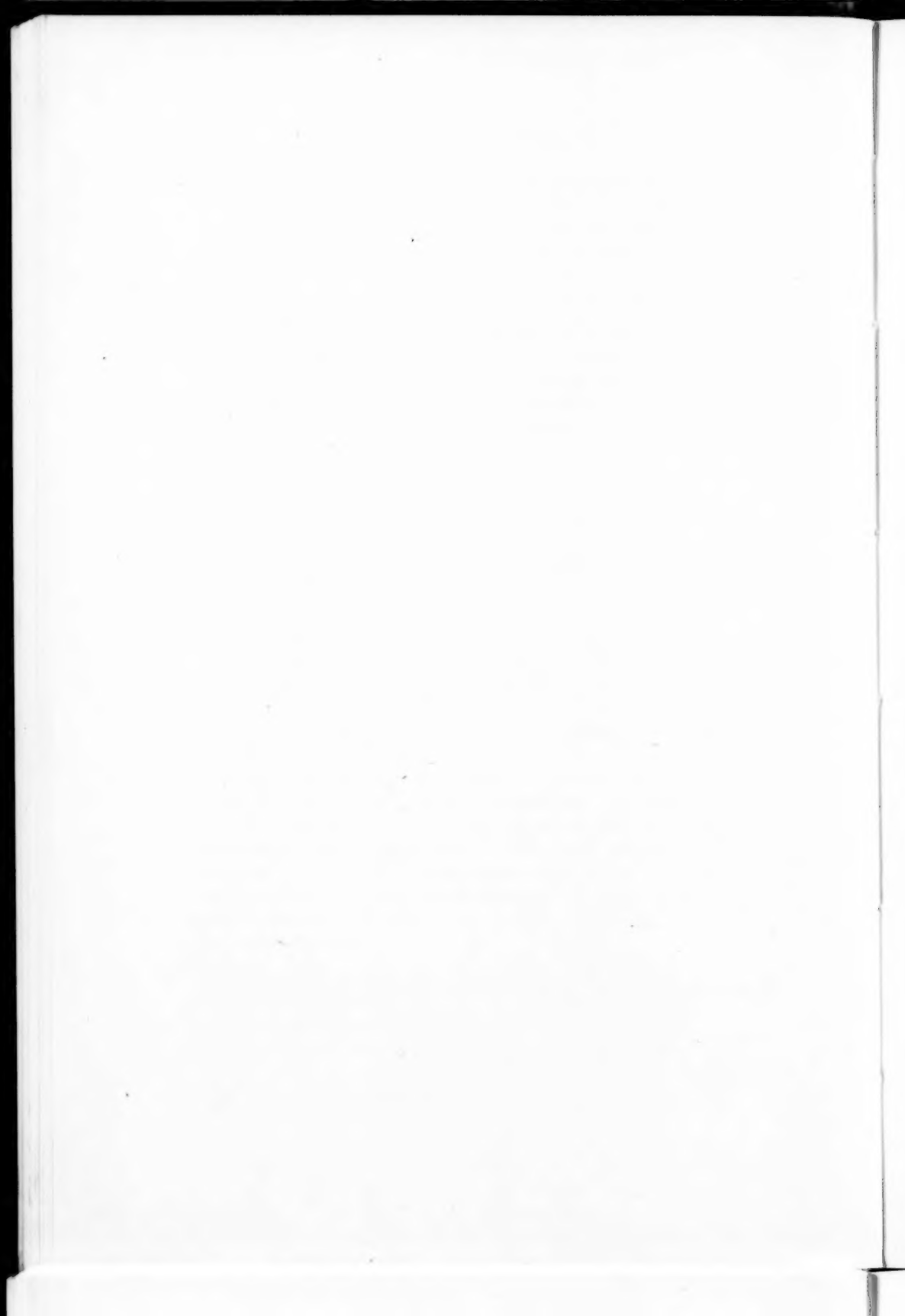
the conclusion no longer necessarily follows, since the continuous existence or permanence of sensible things will be assured by their being perceptible by the minds of men only.

The question of its meaning now being clarified, it is possible to enquire into the truth of the New Principle and hence the falsity of the doctrine of the vulgar materialists, that common things exist unperceived. Berkeley offers three proofs, which it will be convenient, in the next part, to consider in turn.

(To be concluded)

Bowdoin College.





THE CONDUCT OF LIFE *

RUTH NANDA ANSHEN

If we consent to accept the hierarchical order of mankind in terms of the three categories of apostle, priest and layman, then it seems we must endow Lewis Mumford with the role of minister to the spiritual and moral consciousness of modern man. Lewis Mumford transmits to humanity the philosophic and moral vision of the leaders of thought. He is consecrated to those immutable values which are constantly renewed and chastened through suffering and resurrection. And in *The Conduct of Life* we face in all its depth and height the meaning of *humanitas* and the significance of tradition. Here we find not a *system* of philosophy, not a concern for sense data and logical universals, not an execution of ideas and nature by treating them as though they were intellectual atoms in which process all the laws of logic are obeyed, but from which has been snatched that act of cognition relating the logical structure to the essential traits of the object. Here we are nourished and reassured by a dedication to the very substance of philosophy and metaphysics, to the restoration of philosophy and metaphysics in all their power of evaluating the meaning of existence and of actualizing the laws governing the unifying principles of man and the universe.

It seems to be important to recollect that if there were no names in the history of philosophy except those belonging to the creators of new systems, this would mean the extermination of culture, and thereby the death of philosophy itself. The very word "culture" and the inherent meaning in philosophy presuppose a continuity. For this reason they evoke disciples, imitators and followers who weave a living and indestructible chain. In other words, a tradition is sown, the fruits of which are perpetually gathered in values, reassuring man of the ultimate and eternal harmony of all being, reaffirming the truth that nothing finally that is contingent or fleeting, nothing that is

* *The Conduct of Life* by Lewis Mumford, New York: Harcourt, Brace and Company, 1951; 342 pp. \$5.00.

exclusively material or functional *within* life can sustain life, and reestablishing that only from that which lies beyond the phenomena can mankind gain access to all the abundance of spiritual resources indispensable for dealing with life. And it is tradition that constitutes an everlasting re-dedication to the life and the immortality of the spirit. Such re-dedication is Mumford's fruitful contribution to the philosophy of history and of ideas. He keeps the concept alive.

The Conduct of Life castigates those prefabricated metaphysical theories that are incompatible with the true nature of man and the universe, and repels those ontological revivals that only succeed in obfuscating the meaning of man in relation to the universe and to himself. Because of his reevaluation in terms of contemporary knowledge of those basic truths which it is the purpose of tradition to transmit, Mumford compels us to consider in the light of conscience what it is our will to permit to endure of the heritage which we have cherished from previous ages and which has been the fountain and foundation of our civilization.

With Hegel, Mumford warns us that even the memory of immutable ontological values may be lost, without our humanistic tradition. We may derive some degree of comfort in this reiteration of ancient truths. We may drink in new confidence and strength from the knowledge that our finitude is anchored in the infinite and that it is tradition which conveys and communicates to us this reassurance. For man has seen in it the reality of the immutable values to which we can turn whenever the language of history is too overburdening.

Mumford's unique role is to point out in what way we possess an element of permanence in that tradition which alone can give meaning and purpose to mind and spirit. He reclarifies basic concepts, reminding us that a spiritual tradition does not consist in a set of doctrines or dogmas to be arbitrarily accepted or rejected. Tradition must remain undogmatic. Tradition must remain free. The supreme pattern of tradition reveals to us through the ages the essential nature of man and the task for which he was born — the indispensable task of shaping his essence and his existence, his very *ὄντος ὄν* into a true man, thereby fulfilling the Aristotelian demand of not betraying his

entelechy. We are drawn *ad fontes* by Mumford's revivification of the meaning of "tradition" which implicitly denotes a basic truth, which cannot perish since it is a truth. This of course does not preclude the possibility nor the reality of change. Authentic spiritual tradition implies the transmission of man's most basic values, his most precious and indispensable possessions: the consciousness of his most serious experiences which preserve their classical form in the works of the creative spirit. These works are eternal, immutable. They constitute the symbol of immortality. They reveal to us, in Dante's words: *come l'uom' s'eterna*. They are the incarnation of personality. When Mumford says "the birth of a universal personality is the equivalent, if not more than the equivalent, of a sudden appearance of a new species in nature," it is not that he refutes himself as a conveyor of tradition by these words but rather that he does not impoverish and restrict the meaning of change. On the contrary, he recognizes that there resides in every metamorphosis an element of permanence without which change itself would possess no organic meaning or function. "... it is only by a repetition of the original experience, by incarnation and conversion that the original change can keep from lapsing into a social stereotype, given to vain repetitions and empty rituals, incapable of producing the freedom, the autonomy, the creativity of the original person."

Man's life is not only transcendent and immanent; it is also historical. It is an unending rhythm of being and becoming, of birth and death. It may be symbolized by the eternal flux of Heraclitus for whom the *λόγος* epitomizes tradition, the eternal *Word* that pervades and nourishes the entire process. It is the divine fire in each human soul, the primordial *good*, even though it is unconscious.

In *The Conduct of Life* we find a plea to rededicate ourselves to that common metaphysical faith which is crystallized in the tradition of the East as well as of the West and which transcends all, all antinomies and conflicts. That which is ontologically valid and permanent for man, Mumford reminds us, is revealed by history in the never-ending process through which a certain specific form of culture or category of values, originally the outgrowth of a definite social pattern, reveals

its universality and applicability by adapting itself to changing conditions. The permanence of the cultural form is portrayed, rescued from petrification in the ephemeral. Mumford presents the inherent constancy of certain fundamental ideas as the nuclear structure underlying the process of social change and intellectual and moral development. He shows us how the original form recreates and sustains itself by means of *metamorphoses*. Tradition thus becomes a means of selection, a process of natural and inevitable choice in accordance with criteria inherent in the law of its own nature. The objective judgment of the ages is its confirmation even as the moral and intellectual truth, of which it is the custodian, is its continuous rebirth in every generation of men. When Mumford declares that "Man is wiser than men" he but reiterates the ancient knowledge of the immutable structure of the human soul, and the further consciousness that man cannot *acquire* the truth but can only *be* the truth, through grace. "I am the Spirit and the Light." These words of Christ can afford no other meaning than that conveyed to us in *The Conduct of Life*: namely, that the nature of man passes through perpetual change according to principles which are eternal, and therefore consists in an immutable ontological substance.

Mumford reaffirms the ceaseless renaissance of the great spiritual heritage of mankind. He points to the evidence of the constant revival of the human mind and its creative energies. He shows how the spirit perpetuated itself from the time when Rome first coincided with the *daimon* of Hellas and derived from this profound spiritual experience the sources for its own culture and civilization. He further demonstrates in what way the identical process took place in an apocalyptic Asiatic religion when Christianity found its manifestations in the fruits of the classical Greek and Roman spirit. Something new was born even as something old was preserved. And in the Christian world, ecumenical concepts of life and destiny began to pervade the soul of man. Both St. Augustine and St. Thomas are products of this subtle symbiosis of Christian faith and ancient Greek culture.

We find in *The Conduct of Life* a renewed and invigorated meaning of *humanitas* and we are given, in an abundance of

historical examples, the evidence that the influence of tradition has been most fecund in those epochs which are the culminating foci of the creative power of mankind. In such epochs the *enforcing* and *liberating* results of *humanitas* and tradition appear in equilibrium. Mumford warns us that the core of tradition, the vehicle of the immutable ontological and moral values of the human spirit, will be in danger of perishing without the creative power of our own civilization and without the sense of its own greatness. The most potent unifying force of the moral and intellectual consciousness consists in that tradition which has sown the seeds of universal brotherhood and not the dubious amenities of science and industry. On such a homogeneous basis we may revivify those values which are indispensable for creating a reconciliation of the Eastern and Western mind and for clarifying its structure and fate. For in the final analysis our world is a hellenocentric universe including both East and West and affording creative protoplasm for the World Age which is uniquely ours.

The spirit of modern culture, in spite of its atomization, yearns toward a new synthesis which refuses to deny any essential quality of man's nature but rather generates an organic unity, a harmonious equilibrium. In this lies the impulse toward self-realization. This was, after all, the basic problem of Plato and Aristotle, even as it is the fundamental problem of our own time. They too lived in a period of history from which such equilibrium had vanished. The *Zóon πολιτηκόγ* occupied the highest rung of the hierarchical ladder and therefore the spirit of the culture with all its moral and intellectual creativity was submerged. Individual liberty assumed hyperbolic proportions both intellectually and economically and an ethnocentric egotism dominated the theory and practice of political life. We are shown in *The Conduct of Life* the way in which the dual aspect of our heritage, mirroring a process which has perpetuated itself for centuries, the great and false antinomy between tradition and reason, may be reconciled.

The new age will begin when a sufficient number of men and women in every land and culture take upon themselves the burden men once sought to transfer to an Emperor, a Messiah, a dictator, a single God-like man. That is the ultimate lesson of democracy: the burden cannot be shifted. But if each one of us, in his own full degree, accepts this desperate condition for survival, that which seemed a threat to

man's further development will be transformed into a dynamic opportunity.

In these words Mumford bestows new meaning upon individuality, meaning which can be fortified only through the renewal of moral and spiritual law resulting from the moral and spiritual revolution through which contemporary man is passing. Such changes will be actualized by the recognition of a common humanity among peoples. We all possess the same human nature, the same primordial tendencies, and the nature we hold in common is a rational nature subject intellectually to the attraction of the same fundamental objects.

Law depends upon morals and morals upon God. The divine source, the *origo et fons*, of the moral conscience is not, however, clearly made evident in Mumford's discussion. One feels a certain rationalism in him that is not able ultimately to surrender to the ineffable and the boundless. It is as though he commits that very error which he deplors. He seems at moments to forget that, in the words of Blackstone: "Man considered as a creature, must necessarily be subject to the laws of his Creator . . . This law of nature being co-equal with mankind, and dictated by God Himself, is of course superior in obligation to any other. It is binding all over the globe, in all countries and at all times; no human laws are of any validity if contrary to this; and such of them as are valid derive all their force, and all their authority, mediately or immediately, from this original." And yet Mumford would readily accede to the truth that just as there is in the universe a physical order governed by physical law, so there is a moral order intelligible to human reason and governed by moral law. His awareness of God and of the moral law, however, is historical rather than supra-historical and transcendent. Nevertheless and paradoxically, Mumford possesses full consciousness that without the embrace of natural law, without *λογος* and *ἔπος*, there can be no *βίος*. And he accepts with a poignant insight the Heracleitean truth that the way to the *ἀρχή* and the *τελός* are one and the same, that essence is indispensable to existence, potency to act and humanity to man. But one is left with an uneasy conviction that Mumford's God is the Spinozistic *amor Dei intellectualis*, that the spontaneity and procreative principle

of the divine substance is rational and somehow manipulatable. If the cosmic mind or God is merely historical, is not omnipotent, does this indicate that the anarchy and chaos of nature are beyond the peripheries of God's interest, menacing Him as well as man with an obscure fate? The ardent Zoroastrians and some others who have preferred to preserve God's goodness and to sacrifice His traditional omnipotence surrendered to this belief. I, myself, am inclined to believe with Boehme and Meister Eckhart that everything has its expanding origin within the cosmic Mind or God and that the anomie in nature is "that in God which is not God," even as evil is the negation of good rather than a separate and autonomous principle. The evolution of the cosmos may then be accepted as the work of integrating those autonomous centers of activity in the cosmic mind that form its essence accepted divisively and as a plurality, and informing it with the harmonious attributes of nature in all its identity and diversity. For in Mumford there is a consecrated faith in the eschatological and redemptive mystery and power of history and tradition, nobly enunciated in *The Conduct of Life*.

Mumford's preeminence lies in his ability to articulate this faith, to seize the idea and to facilitate its epiphany, to warn the analytic and scientific mind against mistaking the mere concept for a living and life-awakening image. For life is death unless informed by Elementary Ideas: ideas not as lucid abstractions held in the mind but as cognized, or rather recognized, vital attributes of the subject's own being. Though such living ideas become manifest only in the terms and style of some specific historical moment, nevertheless their spiritual, moral and intellectual strength lies not in what captivates the mind but in what stirs the heart. Could Mumford, however, have added to this faith in intuited reason the revelatory consciousness of the union of the transcendent and immanent within the mind of man at every moment of his existence, could he have pointed to the eternal design which rests in all temporality, could he have declared that the fabric of the archetypal image of man can be woven nowhere but in heaven, his contribution to the creativity of man's spirit would be even greater. Nevertheless we owe a debt of gratitude to Lewis Mumford for

restoring meaning to facts; for abrogating the false antinomies of subject and object, God and man, good and evil, freedom and necessity, infinite and finite; for demonstrating that there are no antinomies in nature, that in nature all is one: choice and givenness, opposition and union; for refusing to hypostatize function for meaning; for defining man's place in the universe; for declaring that we shall be saved not by a new theology but by a new *mythology*; for returning the *cogito* to the *cogitatum*; and finally for emphasizing that the obligation devolving upon our conscience and our will is that we must believe in man not only as the Christians believe in man out of loyalty but as the Greeks believed in man out of dignity and pride. *The Conduct of Life* constitutes a recognition, and indeed a defense, of human personality. It is an expression of the perfectibility of man and of the power and dignity of his reason. But in the end, as Mumford declares, it is faith alone which can lead man to his end of eternal blessedness in a dynamic process of growth. The gradual progress of the soul towards its own fulfillment or towards God may be symbolized by Dante's long and perilous voyage. The words which the poet attributes to Virgil may indeed well be applied to modern man:

....., so far as reason plead
Can I instruct thee; beyond that point, wait
For Beatrice; for faith is here thy need. *

New York.

* *Purgatorio*, XVIII, 46-48.

Colloquium No. 3

A CRITERION OF NECESSITY

FRANCIS V. RAAB

1. Necessity cannot be defined in terms of any criterion, i.e. an experience which we regard as a reason for calling a proposition necessary; because: a) The meaning and designation of "necessity" is not to be confused with those experiences which warrant its use; b) A criterion of any one kind of necessity is too specific to provide us with a generic definition.

2. Necessity is a generic concept definable as: the existential impossibility of exceptions.

3. Necessity can be specified only by means of a criterion. For example, we call a proposition *logically* necessary when we see that its denial is self-contradictory. Or, we call a proposition whose denial is not self-contradictory, *non-logically but a priori* necessary, when we know that although we can imagine (not conceive) an instance of it, we cannot imagine an exception.

4. "Whatever is red is extended," though not logically true, can be called necessary because while instances of it can be imagined, exceptions cannot. This criterion is a sufficient reason for claiming necessity. No more reason is required.

The virtue of the commonplace definition urged in (2) is that it escapes the "psychologizing" of "necessity," provides a generic meaning embracing logical, nomological, and non-logical but *a priori*, necessity. It contains another modal term and introduces the simpler notions of "truth" and "falsity" by way of the notion of "exception."

University of Minnesota.

COMMENTS ON MR. RAAB'S THESES

I

RULON WELLS

On 1, 3, and 4. The author confounds criteria with differentia. A criterion is ordinarily understood to be a property (i) such that it lies within our power to test whether or not it is present, and (ii) which is not essential, i.e. which is contingent rather than necessary. If it were not for (ii), there would be no point in contrasting criteria for the application of a term with the meaning of the term, or with definition, essence, differentia, etc. And indeed, a criterion is commonly not only not necessary, but is not even in point of fact universal. Not every red-skinned apple is sweet; not every man with an "honest face" is honest.

If necessity is a generic notion, then, like any generic notion, it becomes specified not by a criterion as such but by a differentia. The differentia of logical necessity is that the denial of a logically necessary proposition is self-contradictory; one of our best criteria of logical necessity is that after careful consideration *we* see (or rather, believe — rightly or wrongly) that the denial of the proposition is self-contradictory.

On 2. The author implies in 3 that besides logical necessity and necessity that is non-logical but still *a priori*, there are other, and therefore *a posteriori* species of necessity. Perhaps he has in mind causal "necessities," and it may be that he had these chiefly in mind when he so wrote his definition 2 as to imply that *all* necessary truths are general, as well as universal. (What about "4 is an even number"?) But any proposal to consider causal truths as necessities raises the question whether the single word "necessity" truly covers a single, unitary property common to the laws of nature as well as to the laws of logic and other *a priori* truths.

Yale University.

II

RICHARD BRANDT

1. The formulations of both definition and criteria use various terms for which satisfactory definitions do not exist: "existential impossibility," "self-contradiction," "proposition." The formulations therefore, even if correct, are only a partial solution of the problems.

2. The definition appears to admit as necessary only statements containing variables, since "exception" must refer to values of the variables for which the statement is false. Some provision, however, should be made for statements comparable with, "This patch could not have been red, had it not been expansive," which the writer would apparently admit as necessary.

3. It is not clear what is meant by a "criterion." The *experiences* (seeing that, knowing that) as such might occur even if the corresponding proposition were not necessary in the generic sense — unless "seeing" (and *mutatis mutandis* "knowing") is used in such a way that it is incorrect to say that someone has "seen that a proposition is self-contradictory" unless it is self-contradictory. And in this case it would not be possible to tell, from *inspection of the experience*, whether "necessary" is applicable or not.

4. "Self-contradictory" cannot be used in the broad sense of some philosophers (e.g., Moore, in Schilpp volume, 607-608), else the logical and the non-logical forms of necessity could not be distinguished. Assuming a narrower use, we may suppose it is intended to classify as self-contradictory statements in the natural language like "Some bachelors are married," so that the vexed question of "rules of language" is raised; statements about self-contradiction will then presuppose information about the linguistic habits, i.e., criteria of application, of individuals or groups.

5. There are difficulties about "knowing that we cannot imagine an exception." (a) It is notoriously difficult to decide what we can or cannot imagine. (b) It is not obvious that a person's inability to imagine something at t_1 implies he cannot

imagine it at t_2 ; often we are unable to imagine something simply because we are confused. The foregoing points taken together suggest that, using this criterion, we ought at most to claim as *probable* that a proposition is non-logically necessary. (c) The criterion rules out in advance the possibility of necessary truths containing *a priori* concepts, instances of which are unimaginable, e.g., true propositions containing the notion of *existential impossibility*.

Swarthmore College.

III

HENRY W. JOHNSTONE, JR.

4. In some artificial languages, "Whatever is red is extended" would, of course, be an analytic truth. But except in such cases, this proposition represents only one of several alternatives. For it adumbrates the Kantian view that space is a "form of intuition" through which alone color-vision is possible.* One alternative to this is an atomistic empiricism or Leibnizian monadism on which the perception of space is derivative from and temporally posterior to the perception of color. On such a view there would be pure unextended colors.¹

3. Although doubt may thus be cast on this paradigm, Mr. Raab's definition of "necessity" should be retained. The issue between the Kantian and the atomist is not fundamentally that either claims to have found an exception to the general statement of the other. For neither statement is an inductive generalization; each is rather the expression of a necessary metaphysic — necessary for the expresser because definitive of his mind and of the character of the inquiry in which that mind is engaged. Thus there are two types of necessity: (A) the necessity, for a mind, of asserting its own metaphysic, and (B) the necessity stipulated by a metaphysic; e.g., "Whatever

¹ An example is the view of Wundt. See Boring, *Sensation and Perception in the History of Experimental Psychology* (New York, D. Appleton-Century Company, 1942), pp. 233-238, *passim*.

is red is extended." As Mr. Raab says, this can be specified only by means of a criterion. The assumption that "its denial is self-contradictory" is definitive of the logically necessary proposition is one such metaphysical criterion.² The criterion given for *non-logically but a priori* necessary propositions is, however, circular, since what one supposes oneself capable of imagining depends upon his metaphysic; consider again the Kantian *vs.* the atomist.

2. This definition of "necessity" is thus correct in two distinct senses. Where "existential" refers to objects, facts or situations, necessity B is defined. And where, as in existentialism, it refers to a mind's self-definition through a metaphysical view, necessity A is defined.

1. Therefore, "necessity" cannot be defined in terms of any criterion, because:

- a) The *existential* significance of necessity A is not to be confused with the *essential* significance of any criterion;
- b) Any criterion for necessity B could have an alternative.

Pennsylvania State College.

IV

MANLEY THOMPSON

1. I agree that we cannot define — or I should prefer to say simply, adequately elucidate — what we mean by "necessity" solely in terms of any criterion. Yet I would not say that "necessity" has a designation, or is a designative term, in the ordinary sense in which terms are said to have a designation, as "man," for example, designates men.

2. While there are, to be sure, different kinds of necessity, it does not follow that each kind must have its own peculiar

² Even *this* assumption has alternatives, too; see Arthur Pap, "Logic and the Concept of Entailment," *The Journal of Philosophy*, Vol. 47, June 22, 1950, pp. 378-387, and W. V. Quine, "Two Dogmas of Empiricism," *The Philosophical Review*, Vol. 60, January, 1951, pp. 20-43.

criterion. We cannot imagine, for example, a red patch that is also not-red at precisely the same time and in the same respect that it is red, any more than we can imagine a red patch that is unextended. Yet the necessity in the two cases is different. We may obtain the first, merely by substituting in the formula " $\neg(p \supset p)$," but for the second we must turn to the definition of "color." The criterion of not being able to imagine an exception thus applies to diverse kinds of necessity. This criterion is also notoriously unreliable in many cases and seems far inferior to the criteria we may specify by means of the rules of a calculus.

3. "The existential impossibility of exceptions" hardly helps as a definition, or even explication, of "necessity." "Impossibility" and "exception" both involve the notion of necessity in their explication, and I see no basis for saying that they are more primitive and serve to define this notion. The introduction of "existential" merely adds to the complication.

University of Chicago.

V

GUSTAV BERGMANN

1. Let me for the moment call *structural* characters possessed by propositions. Characters of the beliefs with which propositions are or may be held I shall, for want of a better name, call *psychological*. Mr. Raab, I take it, wants us to distinguish between these two kinds of character. I agree emphatically. Failure either to make or to maintain the distinction is, in my opinion, one of the flaws, if not the main flaw, of many traditional and current arguments about certainty, necessity, and analyticity.

2. I do not know why one should, as Mr. Raab recommends, search for a generic concept of necessity. As they appear in ordinary and philosophical usage, "necessary" and "necessity" have three root meanings that have nothing to do

with each other. The first is rather trivial; it involves an appeal to well-established laws of nature, as in "Men of necessity die." The second refers, in the terminology of the moment, to a psychological character, a quality of mental acts. The third claims to be the explication of analyticity. For the most part it signifies no more than the confusion of a searched-for structural character with a psychological one. For, analyticity, if it is anything at all worth talking about in first philosophy, is a structural notion.

3. Whether an adequate structural explication of analyticity can be given is now again controversial. I have argued and am still prepared to argue for the affirmative.¹ Nevertheless, I fear that calling analyticity logical necessity is at best a definition in use of the phrase "logically necessary." Thus I cannot tell whether Mr. Raab's idea of analyticity is adequate. But I agree with him in rejecting explications based on what can be conceived or imagined. My reason for rejecting them is that, if they establish anything, they establish a psychological character and not, as they intend or pretend, a structural one.

4. The core of the argument concerning the status of such propositions as "Whatever is red is extended" concerns, again, an alleged or denied structural character, not a psychological one. I happen to agree with Mr. Raab in that I know no good meaning of "analytic" in which these propositions would be analytic. But it follows from what I just said about conceiving and imagining that he does not, in my opinion, succeed in setting these propositions apart by pointing at a structural character which they and they alone possess. Only such a character could properly be chosen as the referent of a distinct meaning of "necessary."

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¹ See my "Logical Atomism, Elementarism, and the Analysis of Value," *Philosophical Studies*, 2, 1951 and, for more detail as well as criticism of the pragmatist position recently adopted by Quine, "Two Cornerstones of Empiricism," to appear in *The Analysis and Synthesis of Knowledge*.

RESPONSE TO COMMENTS

FRANCIS V. RAAB

Mr. Wells (1) thinks that I confound criterion with differentia. This, perhaps, because he uses "criterion" in two senses: "A criterion is... a property..."; and, "...one... criterion... is that... we see..." Only the latter use corresponds to mine.

Mr. Wells' (3) and Mr. Brandt's (2) counter-examples are either not necessary because "4" and "this patch" might not name anything, or else, if they are singular conditionals, they are necessary because they are "instantiations" of necessary universal propositions.

I disagree with Mr. Johnstone (3) that our metaphysic dictates what we can or cannot imagine. Instead, we discover what we can imagine by using our imagination. We are certain that we cannot imagine a red boundary, and it makes no sense to ask for a further criterion to tell us whether we are certain, just as it makes no sense to ask for a criterion of when we detect that we have detected a self-contradiction.

Mr. Brandt (5) correctly point out that my knowledge of what can be imagined is often subject to revision. But if we are uncertain as to whether we can imagine an instance and an exception to a proposition, we obviously refrain from calling it necessary. This situation bedevils the use of every criterion. There is no such thing as an absolutely fool-proof criterion. The more one insists that the unimaginability criterion can lead to error, the more he must insist that we cannot be certain that there are entailments in geometry or logic.

Mr. Thompson's two cases (2) are distinguishable by using as criteria, unimaginability and the formula " $\neg(p \cdot \neg p)$." The first is not unreliable; note that it requires an appeal to instances and exceptions. There is no contingent proposition, instances of which can be imagined, but exceptions to which cannot; and, there is no *a priori* necessary proposition, exceptions to which can be imagined.

The notion of an exception does not involve that of necessity. An exception is whatever falsifies a universal proposition.

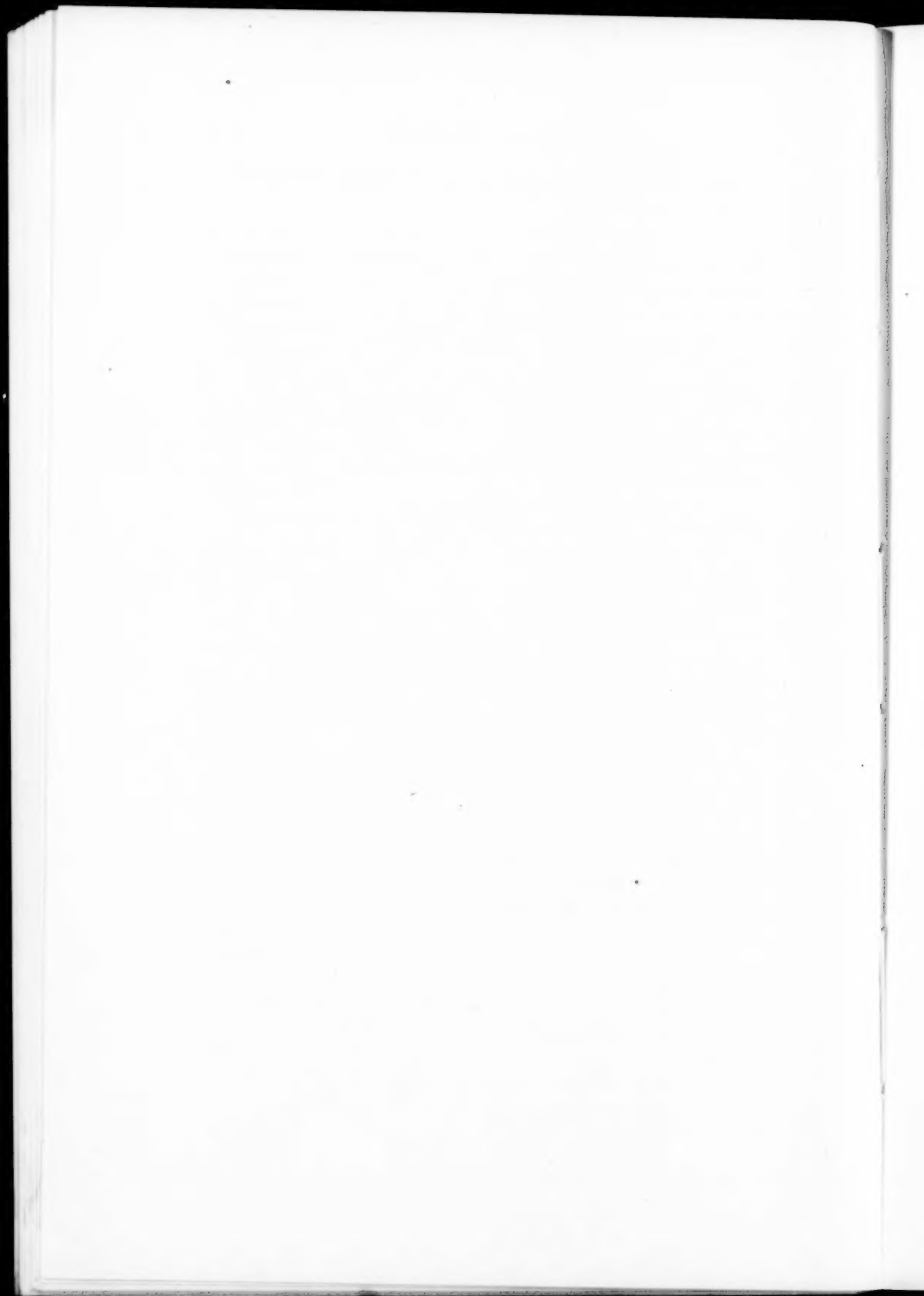
A black swan is an exception to the non-necessary proposition:
All swans are white.

"Existential" does add complications, but to refuse to add this qualification will result in thinking that necessity designates merely a limitation in, for example, our powers of detecting self-contradiction, etc. If "necessity" is defined in terms of inconceivability or unimagability, we introduce psychologically dispositional (modal) terms into our analysans. Though the result of using a criterion is our only warrant for calling a proposition "necessary," it cannot serve as the analysans of "necessary." "Being seen to be triangular" though a criterion of being triangular, is not the latter's analysans. This criterion cannot be regarded as unreliable just because later experience shows that the object is square, for we then rely upon another criterion, namely, "being seen to be square."

Mr. Brandt (5) is correct in claiming a limited use for the unimagability criterion. It can test for the necessity of only those propositions whose terms denote that which is concrete enough to be imagined. But this is no defect. There is no omnibus criterion for necessity since there are many kinds of necessity. And here I agree with Mr. Thompson (3) that there are other live options as criteria of logical necessity. I used the appeal to self-contradiction merely as an example.

Mr. Bergmann's (2) examples indicate only that there are species of necessity. He speaks of the "explication of 'analyticity'." There is never a problem of explicating philosophical terms. Nor is "analytic" an explication of one meaning of "necessity." No non-modal terms can serve as the complete analysans of "necessary." "Analytic" is, at best, a somewhat unenlightening adjective specifying one kind of necessity.

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Discussion

THE PROCESS OF EVALUATION

IREDELL JENKINS

The problem that has been central for most contemporary inquiry concerning values has been that of the verification of value-judgments. When a sharp disjunction has been drawn between facts and values, and when it has been accepted that facts have a preeminently objective status — that the descriptive sciences are the most secure and exact, then it is inevitable that there should be an attempt to impose upon value-judgments — upon the normative sciences — the same form and conditions that hold for judgments of fact. If this is to be accomplished, it is imperative that values should be *measurable*. Hence, most modern doctrines have been insistent in defining and treating values in such a way that they could be measured.

I think this is a mistake. It sacrifices the actual character of values to a set of operational and methodological pre-suppositions. The most effective way to argue against such doctrines is by a close examination of the manner in which values occur and operate in life. Such an examination will show, I believe, that the actual process of evaluation is a very much more complicated procedure than is supposed — or stipulated — by these doctrinaires. To exhibit its complexity, briefly and schematically, is the purpose of the present paper.

What actually transpires in the determination of values? What does man do when he tries to settle the relative value of various objects, of alternative courses of action, of different ends-in-view, of conflicting goals or duties, each of which appeals for his support? I think we can identify six distinct stages in this evaluative process by which man moves from an original and spontaneous appraisal to a considered judgment of value. Before describing these, let me say that I am here depicting a normal — or perhaps better, an abstract — pattern. I think these stages often — probably usually — occur in the order I shall designate. But I recognize that some of them are

frequently suppressed; and even when all occur, their order may be inverted in various ways.

The value process has its inception in what I shall call *emotion*. Other terms that have frequently been used to denote this same general datum are "desire," "liking and disliking," "appraisal," "approval and disapproval," "drive," and "sentiment." What are later to emerge as values put in their first appearance under the guise of feeling. Some change occurs in the stimuli, whether internal or external, that bombard us; and this change is reflected in awareness as a more or less specific feeling-tone. This may be vague, tentative, and transient, in which case it is apt to die without further issue. But it may be definite, assertive, and intense. In this case, it takes on form, endurance, and direction. It becomes what I am calling broadly "emotion"; and we identify it as hunger, cold, lust, jealousy, anger, sympathy, hatred, impatience, anxiety, and so on through an inexhaustible catalogue. This emotion appears at first as something that we undergo, that is borne in upon us from the circumstances in which we are engaged. But the emotion soon tends to reverse its direction, to find release through the thing or situation that has aroused it, to envisage a change in the relations between the self and the world. That is, emotion seeks an outlet in action.

But in doing so, emotion at once encounters opposition. And the value process moves to its second stage, which is that of the operation of *habit*. I shall not attempt anything approaching an adequate analysis of this factor, but shall offer only a few comments that are pertinent to the present discussion. Habit is a pervasive background that conditions both the occurrence and the release of all emotions. Habit has itself a complex origin: it is at least a precipitate of training, experience, and reflection. Habit operates upon emotion in three ways that are important in the value process. It acts as a brake, restraining the immediate and spontaneous release of emotion. It acts as a prism, fracturing emotion into the recognition of various possible fulfillments. It acts as a levee, directing emotion along a settled course.

The value process may be subverted at this stage. If emotion is sufficiently powerful it may escape from the control

of habit, asserting itself and seeking its object with no further consideration or compromise. In this case it becomes passion.

But usually habit is effective. Emotion is checked in its course, is made to envisage and estimate alternatives, and so filters through habit in the form of *preference*. This, the third step in the value decision, is in most cases taken quickly. The preferred is that which appears to offer the most accessible and satisfactory consummation of desire. In arriving at a preference, we consider the various objects that are available to us and the various courses of action by which these objects can be exploited: we then select the object and the action that seem most appropriate to our controlling emotion. But we soon discover that the world does not submit passively to our preferences. The physical and social environments both confront us with obstacles: conditions that must be satisfied, limitations that cannot be escaped, rules that must be followed, standards that must be adhered to. And the sense that we inevitably have of our total personalities and of our continuing careers forces us to qualify and integrate the expression of our preferences. If these impediments overcome us, we resort to such vicarious and sublimated emotional releases as day-dreams, fantasy, or sentimentality. The more normal and healthy course is to accommodate ourselves to reality through the exercise of discipline, prudence, and discrimination. When we do this, we transform preference into *intention*. This, the fourth stage in the value process, defines what we deem the most personally satisfying course of action in the situation confronting us.

The value process frequently stops here. We have now considered our original emotion — want, desire, impulse, etc. — in terms of the needs and limitations of the self and with reference to the possibilities and demands of the world. This consideration yields the course of action that seems hedonically best. We often accept this as the only solution we need, put behind it the force of intention, and seek to realize it. Which is simply to say that expedience is the most prevalent assassin of value.

We all do act quite largely on this level. But even while we do so, we usually recognize that we are arresting a process that can and should carry further. When action expresses

intention it takes the self as an unqualified end and it treats other persons and things as instruments. Both of these procedures are unjustified. Self-estimation needs to be qualified by a regard for norms and ideals, which reflect the accumulated experience and wisdom of man: without this illumination, our value decisions stand under the shadow of ignorance and eccentricity. Likewise, our treatment of people and things must acknowledge the obligations and the limitations that these impose upon us: without this curtailment of the ego, we deprive ourselves of communion with others and our transactions with things become shallow and arbitrary. Quite often our value decisions are matured and directed by this consideration of principles and this acceptance of responsibility. When they are, they emerge on a new level and occur as *purposes*. Here, our original emotions have been clarified and integrated under the pressure of general standards and compulsive duties. We choose in the light of experience and reason, we accommodate our choices to categorical rules, and what is presently chosen is regarded as a momentary occasion set in a wide physical and social panorama. When we act on the basis of purpose, we submit our subjective preferences to objective determination.

It is frequently maintained that here the value-process ends. Just as one school holds that values can never be refined out of emotions as distinct elements, so another school holds that the quest for values need never go beyond the ideals and responsibilities that we espouse as our purposes. I think the second opinion is as mistaken as the first. To abandon the value-process here is to leave it very largely isolated from the human feelings, needs, and concerns that first gave rise to it. It is to say that the realization of value lies in the acknowledgement of rules, in the conformity of taste to norms, in the subordination of choice to standards. And this is quite simply false. This type of doctrine sacrifices the concrete and particular occurrences that really constitute values, to the abstract and general principles that merely condition values. I have thrown most of my stress on the development of the process of evaluation toward the stage where it acknowledges ideals and accepts responsibilities. Now it must equally be emphasized that these abstract and general principles cannot by themselves generate

or guarantee experiences that are truly valuable. The value-decision must fasten upon objects and must issue in courses of action that come to fruition in experienced satisfaction and fulfillment. Then, and only then, are our purposes translated into *values*. In this process, the role of principles — of rules, ideals, and obligations — is to describe the paths along which values can most effectively be pursued. Their function is the cultivation of our talent for values.

What is the upshot of this whole discussion? I think it is simply this: that values cannot be measured, and that the attempt to subject them to measurement is necessarily destructive of their true nature. This attempt has been made by theories of value that are strongly objective as well as by those that are strongly subjective. These two schools have based their efforts on radically different interpretations, and have sought to effect them by equally different techniques. But the result in the two cases has been generically the same: it substitutes something else for the values it pretends to measure. Persistence in this effort indicates an attitude that attaches more significance to the pseudo-accomplishment of measuring than it does to the real nature of values.

Subjectivists have fastened upon the important truth that values are consummated in human satisfaction and fulfillment. They are intent upon the fact that value is a function of experience. But the texture of awareness that we call satisfaction or fulfillment — or happiness, achievement, self-realization, euphoria, etc. — is notoriously fluid, complex, and amorphous. That is, it is notoriously incommensurable. In order to circumvent this difficulty, the subjectivists must find conscious occasions that can satisfy two conditions: first, they must be the elements of which experienced values are composed; second, they must be measurable. Subjectivists pretend to find such elements in pleasures and pains, favorable and unfavorable attitudes, sentiments of approval and disapproval. These, or similar, psychic phenomena are selected because they at least appear to be simple, distinct, and discrete. I think it is highly doubtful if even these elements can be measured; but I am more than willing to leave that point to the psychologists. For, as

I hope to have shown above, it is altogether certain that these elements are not values.

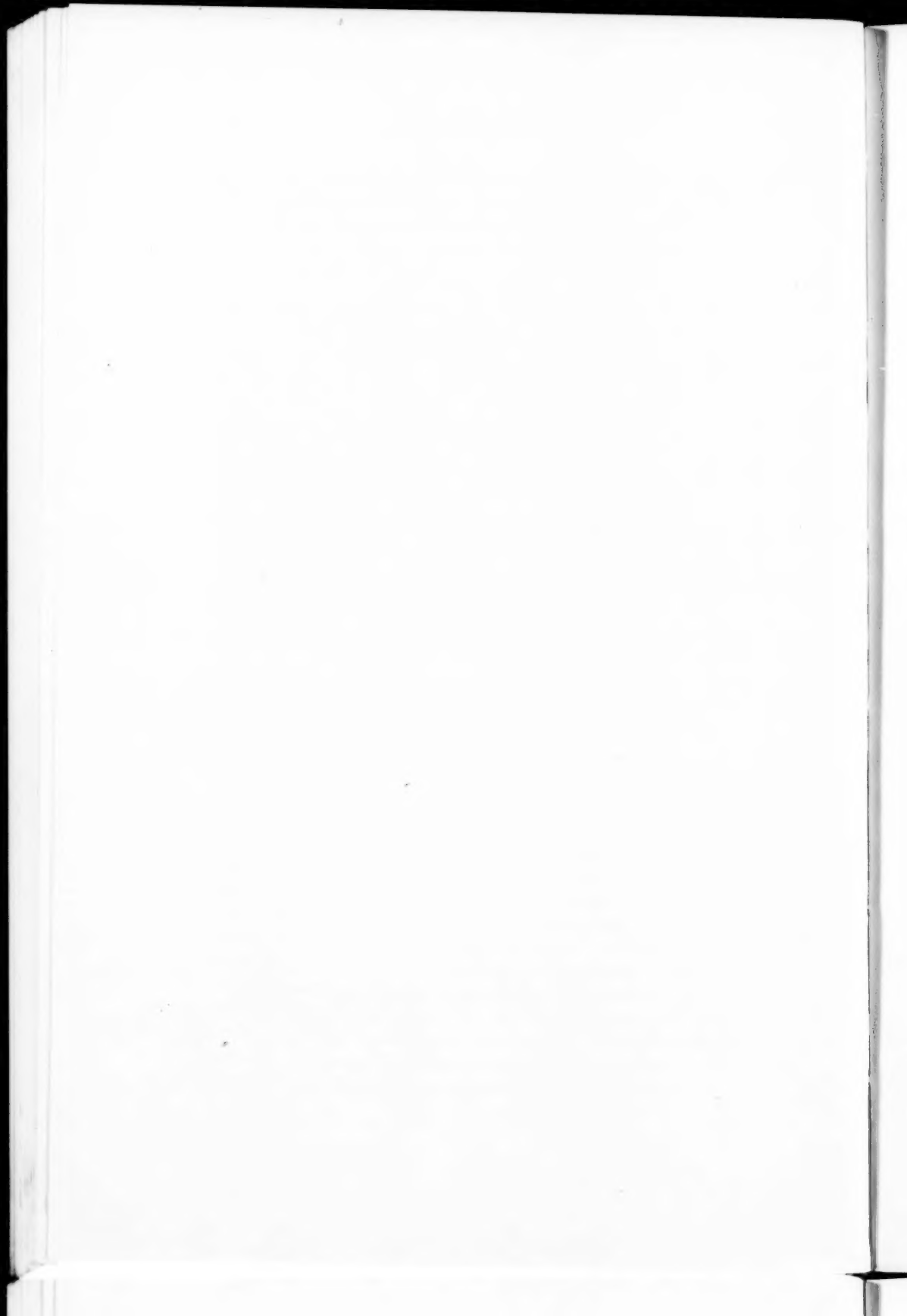
Objectivists have fastened upon the important truth that values are conditioned by the actual character of man and the world, and by the possibilities and the limitations that these exhibit in conjunction. They are intent upon the fact that value is a function of a purposive and directed self-development. If man is to consummate values in satisfaction and fulfillment, he must train his character and cultivate his abilities. That is, he must live in a mature and integrated manner, and so bring to fruition his share of human talents. But the styles of life through which men satisfy and fulfill themselves — the patterns of action that realize their best capacities — are notoriously flexible and various. Individual differences are ultimate, and personalities and careers are inviolably private. Now, whatever is private, unique, and unrecoverable can be measured — if at all — only when it is too late to matter. Consequently, the only recourse of the objectivists is to assert that certain general principles — certain rules, standards, accomplishments, and acquirements — carry and guarantee value. Hence, the emphasis of this school on such factors as knowledge, morality, religion, art, virtue, love, discipline, obedience, and so forth. But, as my earlier description shows, this is to confuse the conditions of value with value itself. For such principles are regulative but not constitutive of value.

The emotions, the attitudes, and the preferences of people can be ascertained by the simple device of polling opinions. The results of such a poll can then be summarized statistically, expressed in quantitative terms, and made to appear as a measurement of values. The modes of life that men adopt, the levels of accomplishment that they achieve, the patterns of behavior that they follow, can be compared with accepted standards. The results can then be stated as relative approximations to a norm — as degrees of conformity — and made to appear as a measurement of values. But in each case the real values of life have slipped between the interstices of the operations that seek to seize them. The first method deals only with the raw material which, if properly processed, will later yield values. The second deals only with the formulæ which,

if properly applied, will promote the occurrence of values. To confuse either of these with real values is to be guilty of a vicious operationalism. It is equivalent to throwing out the baby in order to keep the bath-water clean.

Real values cannot be isolated from their contexts, reduced to simple elements, held static, and located along a graduated scale. That is, they cannot be measured in the usual — or in any meaningful — sense of that term. They cannot, because they are lived occurrences. As such, they are prepared by past deliberations and decisions, they are experienced and absorbed into the present texture of the self, and they enlarge the horizons of future appreciation and action. It would not be very important — even if it were possible — to measure values that have occurred. We recognize the significant differences easily enough. What is vitally important is to understand the process through which values are brought into being. If we do, we can enhance the values that will occur. In sum, the only effective way to discriminate values is by generating experiences that can illuminate and enrich both the past and the future. And this is not measurement — it is creation.

University of Alabama.



Explorations

CURRENT ISSUES OF IMPORTANCE IN AMERICAN SOCIOLOGY AND RELATED DISCIPLINES

PART I

MILDRED B. BAKAN

In their contemporary development in the United States, social psychology studies the effect of man on man, sociology the effect of groups on man, and cultural anthropology the effect of culture on man. Groups are, however, made up of men, and the form groups take affects and is affected by culture. Moreover, when man relates to man, by definition, a group is formed. The distinction between the three disciplines is, perhaps, better understood as a matter of emphasis: social psychology is concerned with the concrete inter-relating of man to man, sociology with that aspect of man's inter-relating to man which is stabilized and differentiated through institutionalization (social support), and cultural anthropology with the institutionalization of man's symbolic activity as culture.

As a matter of accident, cultural anthropology took primitive society as its point of departure; sociology took more complex societies. In principle the generalizations of both cultural anthropology and sociology apply to complex as well as to primitive societies. There is no reason why the two disciplines should not cooperate in a division of labor. In fact, however, something of a feud appears to be in progress. A good part of its basis may be traced, I think, to methodological differences between the kind of sociology and the kind of cultural anthropology that has come to be typical of American practice. Although cultural anthropologists and sociologists are agreed on the critical importance of the "personal definition of the situation," cultural anthropologists are somewhat readier than their colleagues, the sociologists, to venture an assessment of that definition without reliance on questionnaires, attitude scales, etc. It is also apparent that cultural anthropologists are developing quite a "scientific" conscience about the matter. Melville J.

Herskovits, in *Man and his Work* (8),* argues for an approach to cultural norms in terms of statistical variation. George Peter Murdock in *Social Structure* (20) urges the use of statistics and a strict behavioral approach to develop greater precision in anthropological work. Movement toward precision is always commendable. It is to be hoped, however, that the pursuit of rigor will not discourage the cultivation of that imaginative flexibility which the work of cultural anthropologists has hitherto frequently shown. There is no reason why scientific precision can not be interpreted broadly so as to imply the explication and development of the techniques now widely relied upon by anthropologists to reach whatever "definition of the situation" may be culturally significant. If, however, anthropologists follow the lead of American psychologists and sociologists, it is likely that they will interpret scientific precision too narrowly to permit the inclusion of these techniques.

Any account of mind which fails to allow for the possibility of objectivity, obviously leaves the scientist at the mercy of vicious contradiction. Max Weber (32) sought to solve the problem by relegating the subjective aspect of mind to value, restricting his activity as a social scientist to a purely cognitive assessment of inward phenomena. Despite his lack of success in formulating criteria for a value-free assessment of inward phenomena, Weber continued to study man in his inward aspects, convinced of the possibility of objectivity.

American social scientists, on the whole, do not seem to be that sure of themselves. Instead of forging ahead in the search for criteria of objectivity suitable to their own subject-matter, they tend to look to the physical sciences for methodological models. In its most extreme form, this tendency becomes physicalism, a position which takes for its criterion of objectivity membership in the "publicly" existing realm of physical events, and, accordingly, insists that no term be regarded as "scientifically" defined unless it is reduced to physical features. The position finds its chief exponent in sociology in George A. Lundberg (16). It draws its primary philosophical support from the logical empiricists, and its primary psychological sup-

* Bracketed numerals refer to items of the bibliography, which will appear with the second installment.

port from the behaviorists. It is beginning to make sizeable inroads in anthropology.

Despite the fact that the influence of physicalism may be increasing, physicalism in its pure form is not dominant in the social sciences. Instead, physicalism finds its chief avenue of influence through another position: operationalism. The operationalist holds that a properly scientific definition of a term must specify the procedures (operations) governing its applications to the scientist's experience. As expounded by John Dewey (5), operationalism is simply equivalent to relationism; so conceived, operationalism holds no brief for physicalism. However, the form which operationalism takes in the social sciences is typically much closer to physicalism. Commitment to a physicalist meaning basis is avoided, but procedures leading to physicalist (public) application of the terms in question are encouraged. This second form of operationalism is extremely widespread in American social science.

The strict physicalist knows where he is heading; the same cannot be said of the physicalistically inclined operationalist. Again and again he talks like a physicalist; again and again he violates his physicalism. He prefers to talk of "behavior" rather than "mind," speaking, for example, of sociology and anthropology as "behavior sciences"; yet he seems unable to avoid referring, also, to such matters as the individual's definition (perception) of the situation. We see the dual tendencies in the writing of the functionalists (Talcott Parsons (21, 22, 23), Robert K. Merton (18), Robin M. Williams, Jr. (34), Kingsley Davis (3, 4), etc.) and even in Murdock's *Social Structure* (20), despite his insistence on a strict behaviorist approach.

Kurt Lewin (13) argued for the necessity of a conceptual definition of terms as well as for a specification of physicalist procedures for validation. Once this distinction is admitted, it is necessary, however, to clarify the methodological relationship between the conceptual definition, which refers to psychological phenomena in their inward, or private aspects, and the physicalist procedures appropriate for validation. This Lewin never did, and so came in for a good deal of justifiable criticism from his behaviorist colleagues in psychology. If

physicalist operations do not define psychological phenomena, then how can physicalist operations validate their occurrence? Furthermore, if physicalist operations are in themselves the necessary and sufficient basis for the validation of psychological phenomena, then reference to psychological phenomena is superfluous, and at best, heuristic. This decisive argument of physicalism can be met in only one way: by showing that physicalist operations are not in themselves a sufficient basis for validating the occurrence of psychological phenomena.

Psychoanalytically inclined clinical psychologists and psychiatrists know how to guard against projection, the attribution to another of characteristics which are, in fact, aspects of the investigator's personality. Similarly, cultural anthropologists are adept at recognizing the intrusion of their own values in assessing an alien culture. The doctrine of cultural relativism constitutes, in one of its most important aspects, an assertion of the methodological necessity of suspending one's own values in order to reach the characteristics of an alien culture. The avoidance of projection and the adoption of cultural relativism may thus be understood as techniques for reaching an objective appraisal of the inward characteristics of others. The generic conception of objectivity, applicable to the physical sciences as well as to the social sciences, is simply freedom from error in the characterization of the subject-matter being investigated. If correction is possible, the presence of error cannot be taken as an indication of inherent subjectivity. The decisive question concerns the availability of criteria for the progressive elimination of error in the assessment of inward phenomena.

That we can, in fact, come to know the experience of another is attested to by the occurrence of communication — however imperfect and infrequent — in our daily lives. I know what you are thinking and feeling, because I know what I should be thinking and feeling, were I doing what you are doing. This is an application of the age-old method of analogy, which presupposes the basic identity of man. To the relativistically minded social scientist, such an assumption may appear appallingly naive. Properly understood, however, the conception of the identity of man in no way constitutes a denial of the doctrine of cultural relativism. It amounts, indeed, to

nothing more than an application of the principle of sufficient reason. To hold that all other conditions being equal, your experience may still be different from mine, is to posit a basic irrationality. If my conception of your experience is wrong, I can discover my error by noting an unexpected variance in the conditions related to your experience.

Why, then, not follow the physicalist's suggestion and attend *only* to related physical conditions? The answer is that I could not possibly know about the experience of another did I not have direct knowledge of my own. Physicalism, by insisting on the reduction of another's experience to attendant external conditions, precludes reference to the scientist's own experience, and thus cuts the scientist off from contact with the experience of others. To suppose that physical conditions can, nevertheless, be effectively substituted for another's experience fails to recognize (1) that the experience of an individual shows genuine creativity and (2) that an individual's experience is at least as determinative of his behavior as his behavior is of his experience. The creativity inherent in an individual's experience can, in fact, be controlled only by knowledge of the experience. A physicalist orientation destroys control over the creativity of others, thereby lowering the scientist's power to predict and control behavior itself.

Thus conceived, the identity of man is simply the basis for empathy. However, empathy is, in itself, not sufficient to constitute an objective approach to man. We may distinguish between two modes of experiencing: the affective and the cognitive. More precisely, these modes of experiencing are modes of reference;¹ for they relate the individual to content epistemologically independent of himself. In the affective mode of reference, the individual becomes the content experienced; that is, no distinction is felt between experiencer and what is experienced: the essential characteristic is unity.² In the cognitive mode of reference, however, the individual, by recognizing the possibility of relationship of the present content of expe-

¹ For appreciation of the pertinence of a conception of mind as essentially referential, I am greatly indebted to David Bakan (1, 36).

² Hunger, for example, is an unconsummated union of the individual with food; that is, the hungry individual has "begun to eat."

rience to other possible content, detaches himself from the content experienced as a knower opposed to a content. An objective approach demands cultivation of the cognitive mode of reference. However, the affective aspects of experience constitute an essential part of the subject-matter with which the social scientist is concerned. Identification, or empathy, calls for an affective mode of reference on the part of the investigator. Were he to stop there, however, he would so thoroughly become what he is investigating, that perspective would be lost. To restore perspective, the student of culture and personality must attend to the existential context in which the experience he has won through identification occurs. Thereby he relativizes the phenomenon under investigation and opens himself to the discovery of the conditions necessary and sufficient for its recurrence.

In *The American Soldier* (28), a report of research executed under the leadership of Samuel A. Stouffer in the last war, it is stressed that fully effective control of social relations requires the development of a body of social theory which can be applied in the manner of the physical sciences. The sensitivity of the clinical psychologist for the possibilities of personality is regarded as a matter of art, not science; and the whole tenor of the research reported indicates that its elimination was sought. It is interesting to note that on this issue, Weber took much the same position as the physicalistically inclined American social scientist, the only difference being that, according to Weber, the social sciences, in contradistinction to the physical sciences, were doomed to remain immature; that is, dependent on the sensitivity of the social scientist. No doubt, Weber's lack of clarity on this point played its part in preventing him from reaching an adequate formulation of his own approach. For the failure to count the sensitivity of the social scientist as part of the very methodology of investigation, discourages the development of precision in, as well as the full exploitation of, the techniques of identification and suspension of identification for the study of man.

In the 1950 presidential address to the American Sociological Association, Leonard S. Cottrell, Jr. (37) argued for more

concentrated investigation of what he regards an overly neglected area in social psychology: the empathic response. Most significantly, he pointed to its critical importance as an aspect of both ordinary communication and the methodology of the investigation of social processes. Kurt H. Wolff (35, 45) has for some time maintained that the social scientist must cultivate identification with his subject-matter together with readiness to perceive the novel, the alien, the unexpected. Clinical psychologists have always recognized the necessity for sensitivity on the part of the clinician, and the less academically minded have been skeptical about the possibility of eliminating its use with the development of theory. In *Listening with the Third Ear* (24), Theodor Reik illustrates the importance of the development of sensitivity by the psycho-analyst, without, however, making too much progress in the direction of explicit formulation of the principles involved. The late Harry Stack Sullivan (30), whose influence in the United States seems to be increasing, was notable for his emphasis on the methodological importance of identification with the patient in clinical work. More recently, support for this type of approach to the study of man has come from another area of applied work: the control of social relations in extant groups such as industry, business and rural communities. In the 1946 presidential address to the American Sociological Association, Carl C. Taylor (43), who has been supervising research for the United States Department of Agriculture, maintains that fully effective social control requires the combination of what he calls the "common sense" of the wise layman with the research techniques developed by academic sociology. By way of illustration, he cites examples of the use of statistical sampling techniques in conjunction with trained participant observers who use their sensitivity to assess the definition of the situation by the group selected for investigation. The work in group dynamics carried forth under the leadership of the late Kurt Lewin (14, 15) moved in the same direction. Out of this work has come a particularly significant finding: the most stable attitudinal change occurs when the group feels it has itself initiated the change. This finding is, in effect, a testimony to the potency of education as a technique for social control. As such, it

stresses the need for working with the personal definition of the situation effective in the group. Nelson Foote (39) is at present engaged in an attempt to push this approach to social control to maximum effectiveness. An analogous technique is proving itself effective in business administration, also. David N. Ulrich (44) reports that he and his colleagues have been working on a program to increase the sensitivity of the administrator to the dimension of personality as a means of improving social relations in business.

Many American sociologists deplore the tendency on the part of their colleagues to indulge in the development of attitude scales, questionnaires, etc. without due regard for the significance of the facts accumulated. (Edward A. Shils's monograph, *The Present State of American Sociology* (26), is particularly apposite with respect to this point.) The remedy proposed is theoretical development. Robert K. Merton (18) is convinced that sociology does not yet have available the facts necessary for the development of theories of really broad scope. On the other hand, his teacher, Talcott Parsons, maintains (21) that American sociologists are now using an over-all theoretical approach, made up of such components as orientation to the individual as an actor engaged in role-taking; recognition of the importance of the real external situation as well as the actor's definition of that situation; and a conception of institutions as stabilizing influences in the formation of the personality of the actor, and, reciprocally, of the actor's personality as an instrument for the perpetuation of these institutions (i.e., the reality of society as such). In attempting to extend the boundaries of this approach, Parsons (22, 23) found it necessary to make a significant revision: introduction of value orientation as a dimension independent of role-taking and need-satisfaction. This change allows for a sounder treatment of value. Evidently, a good deal of theoretical work can and should be done before the facts, in Merton's sense, are all in. More particularly, what I have in mind is theoretical work which proceeds in close relation with a phenomenological analysis of reference. Parsons does not fully utilize the possibilities inherent in a phenomenological approach. Nonetheless, the change he made depends on insight which can issue only from

a phenomenological orientation, which seeks to appreciate man's capacity to know, the intricacies of his affective processes, and the inter-twining of volition and valuation.

Max Weber (32) and George H. Mead (17) (among contemporaries, Nelson Foote (39) and Kurt H. Wolff (45)), impressed by the metaphysical uniqueness of man the experienter and the depth of his creative capacities, had misgivings concerning the possibility of extensive theoretical development in the social sciences. These misgivings are based on an underestimation of the identity of man. Creativity, in its most concrete expression, takes two fundamental forms: cognitive, through awareness, and affective, through valuation. Cognitive creativity expresses itself in the expansion of knowledge about man and his world, affective creativity in the responsiveness of valuation to man's fundamental need to find himself worthwhile.³ The two are related: growth of awareness being guided by valuation, and development of valuation being dependent on the stage of awareness reached. Although both awareness and valuation are genuinely creative, it is only by exercise of his capacity to know that man develops rational self-determination; that is, freedom of choice. Thus, it is *knowledge* of valuation that enables man to formulate values whereby he can guide his life. Growth in awareness is, accordingly, both an expression of man's creativity and an instrument for maximizing that creativity. Because the scientist can acquire knowledge of himself as a creator, he can achieve control over the creativity of others. The enormous cultural significance of psychoanalysis lies in the progress it has already made toward the control of creativity by virtue of its ability to manipulate concrete awareness for its effect on valuation. However, even at its furthest extension, knowledge of the laws of creativity cannot be expected to yield prediction and control of every

³ My conception of creativity runs very close to that developed by Paul Weiss in *Man's Freedom* (33). There is, however, a difference in emphasis which may have significant ramifications. Weiss interprets creativity as, essentially, an internalization of something external, whereas I interpret creativity as, essentially, a bringing into being of something new. Thus, I classify the internalization of what is external, whether it be possibility or actuality, as itself a new experience, different in kind from the actuality or possibility internalized.

aspect of man's life. For full prediction would necessitate that the scientist foresee and solve every problem any man may even come upon. This would require an impossible omniscience. Far from constituting an obstacle to theoretical development, man's creativity may well be the most fruitful point of departure. The primary function of scientific theory is to increase power of control over the subject-matter investigated. In order that a theory of man be maximally effective in this sense, it must formulate the conditions essential for control of reference, which is, exactly, the form man's concrete creativity takes.

Georg Simmel (translated selections from his sociological writings have recently been published (27)) achieved some acutely penetrating analyses of the phenomenological aspects of sociation. His account of the role of affective (identificative) factors in cementing and breaking group sense in the family, in clubs, among friends, etc. could provide an extremely fruitful basis for theoretical construction. Yet Simmel fell far short of Freud in the way of development of theory, primarily because Simmel was not oriented, as Freud was, toward *effecting change* in reference. Theoretical approaches to man are effective only insofar as they allow for both a full phenomenological approach and also for the formulation of the conditions necessary and sufficient for changing reference.

The type of theory which has developed out of the strictly behavioristic approach to man, under the leadership of Clark L. Hull (9, 19), makes a great deal of use of secondary needs and their satisfaction to explain social and cultural phenomena. However, although Hullian theory can explain the *development* of any secondary need in terms of the kind of satisfaction the individual has managed to find for his primary needs, such as thirst, hunger, and avoidance of physical pain, the assessment of the secondary needs motivating the individual remains impossible in terms of the theory as such. If the entire history of the individual's satisfaction of primary needs could be known, then, in principle, the individual's present behavior — which is motivated by primary and secondary needs — could be explained and predicted. The theory can account for the independent functioning of secondary needs; it does not permit

formulation of the nature of these functioning secondary needs. Accordingly, Hullian theory can be used for the effective control of behavior only when the satisfaction of primary needs is problematic. As soon as a more complex psychological level is reached, control solely in terms of the formulated theory is limited, because of the necessity for assessing secondary needs as such.

Murdock's work, *Social Structure* (20), seems to give compelling evidence for the power of this approach in analyzing and accounting for the facts of kinship structure. His book is, indeed, in many ways an extremely laudable accomplishment. Murdock is not afraid to abstract essential features of his material solely on the basis of imaginative reflection. Much of his success is due to his judicious use of the concept of adjustment in an area in which the needs — largely sexual and economic — move fairly close to the primary level. His use of the concept of adjustment follows functionalist rather than strict behaviorist lines. He does not reduce cognition to physical terms, but seeks rather to understand the relation of cognition to need-satisfaction. Murdock acknowledges his greatest debt to Hull for his application of the latter's theory of stimulus generalization. But he departs from a strict behaviorist interpretation of the theory, for he uses it to account for the individual's *perception* of the stimulus, which is, of course, quite different from sheer muscle response. Murdock also manages to use statistics intelligently: as a technique for achieving more precise description of his data, rather than as a substitute for thinking. He does not expect the results of statistical manipulation to interpret themselves; instead statistics are given meaning in the context of theory. It would, I think, be most unfortunate if the success of Murdock's effort were construed by social scientists as an indication of the power of Hull's theory as such.

Freudian theory (7), like Hullian theory, frequently yields no more than explanation in principle. (For a criticism of this aspect of the use of Freudian theory in anthropology see (41).) Hullian theory emphasizes the importance of previous satisfactions of primary needs for the development of the more complex secondary needs motivating the individual's

behavior at any time, whereas Freudian theory emphasizes the importance of the individual's early experience in the family situation. In using Freudian theory, it is, accordingly, extremely easy to approach the individual in terms of what has happened, or what one thinks may have happened, to him as a child, rather than in terms of his *presently* operative identification.

Kurt Lewin's insistence on the necessity of an ahistorical approach to the individual indicates recognition of the danger involved in over-emphasis of the influence of the past. His point (13) was that theoretical construction in psychology must be oriented around the individual's on-going perception of the situation. This is the single most laudable feature of Lewin's approach, for it focuses attention on what may be called the creative moment in psychological process. His view suffers, however, from two serious shortcomings: (1) use of "hodological space," as a theoretical language, and (2) reliance on equilibrium analysis for explanation of all psychological occurrence.

Hodological space — the metaphorical description of experience by spatial diagrams — seemed to provide a singularly happy solution to the problem of communicating insight into another's experience. Unfortunately, the spatial diagrams become quite difficult to decipher when used for the description of psychological occurrences of some complexity. Furthermore, with translation into a visual picture, the creative moment inherent in psychological process is inevitably lost. Even if this limitation is overcome by interpretation, hodological space is still bound to fail as a communicative device, because it cannot depict the relation between the scientist's own experience and his insight into the experience of another. By failing to relate the scientist and the individual investigated to a common world, hodological space serves to conceal the techniques whereby the scientist gains knowledge of the experience of others. Accordingly, only those who already have the requisite sensitivity can understand the diagrams sufficiently well to know how to relate them to new situations.

Lewin's explanation of all psychological occurrences as the restoration or maintenance of an equilibrium of forces impinging on the individual brings his theory into close rapport with

that of the functionalists,⁴ who conceive of all institutional change as due to a disturbance of equilibrium between needs and institutionalized practice. Lewin's conception of psychologically effective forces goes considerably beyond the ordinary conception of need to include, for example, uncompleted tasks. There are indications that some functionalists are similarly extending their concept of need. Thomas Hancock Grafton (40) offers a provocative definition of valuation as relative to acts in process. Equilibrium analysis is defective because explanation in terms of need-satisfaction, or tension release, is made so exhaustive that knowledge is rendered meaningless or irrelevant. One of the reasons equilibrium analysis is introduced is to account for the fact that man wills, on occasion, *resistance* to satisfaction of his needs. Need-dissatisfaction, tension, stress, can be sought for, enjoyed, and even institutionalized. This persistence in dissatisfaction is attributed to the counter-acting force generated by a conflicting feature of the individual's personality, or the situation in which he is placed, which answers to some other need, or tension. Equilibrium analysis can explain any occurring change, but it cannot produce effective control of change. It gives us a conception of man caught in a nexus of tensions, through which he never breaks to reach the real. The conception of change as due to restoration of equilibrium fails to take into account man's capacity to grow in awareness and, therewith, develop new values to guide his action.⁵

⁴ Shils, who is co-author with Parsons of an important monograph which has just been published, *Values, Motives and Systems of Action* (22), speaks very highly of Lewin in his own earlier monograph, *The Present State of American Sociology* (26).

⁵ Change in valuation can, of course, occur unconsciously; that is, apart from the guiding control of awareness. To the extent that valuation change is unconscious, it is an expression of affective creativity. Thus the cultural phenomenon of drift — social spread of unconscious change in valuation (and behavior) — pointed out by Sapir with respect to language, and generalized by Herskovits in *Man and His Work* (8), is traceable, I think, to affective creativity primarily, the social spread being mediated by identification — which is an affective process — between interacting individuals.

(To be concluded)

Columbia, Missouri.



Announcements

The Spinoza Society of America has been reconstituted through the efforts of the late Dr. Simon L. Millner and the Society's present officers. The aim of the society is to foster the study of Spinoza's works and to stimulate and broaden among its members an interest in the philosophical, social, and psychological thought of the contemporary scene with particular reference to, but not necessarily bound by, the Spinozistic system of thought. It will endeavor to advance these aims by conducting courses in philosophy and psychology, by arranging lectures by eminent scholars, by organizing study groups, and by fostering the publication of significant studies and research by academic philosophers and laymen. Inquiries may be directed to Prof. Walter Bernard, Executive Secretary of the Spinoza Society of America, Long Island University, Paramount Building, Brooklyn 1, New York.

The Institute of Philosophical Research, supported by grants from the Old Dominion Foundation and the Fund for the Advancement of Education, has been established in San Francisco under the directorship of Mortimer J. Adler. It seeks "to promote the advancement of learning in general through an analysis of the fundamental ideas and issues of Western thought," thereby providing "new intellectual resources upon which liberal education at all levels can draw." It will "aim at a progressive clarification of the major philosophical controversies, and work toward a philosophical synthesis or dialectical summation of Western thought."

Dr. Oliver A. Johnson, instructor in philosophy in Yale University and assistant to the managing editor of *The Review of Metaphysics*, has accepted appointment as Fellow of the Institute for Philosophical Research.

The fourth annual meeting of the Metaphysical Society of America will be held in New York in March 1953. The program will include papers by Dr. Roderick M. Chisholm, Fr. George P. Klubertanz, Dr. Richard Kroner, Dr. Richard McKeon and Dr. Paul Weiss. There will be an official commentator and a general discussion for each paper. The nominating committee for officers to be elected by mail ballots consists of Fr. Joseph

Owens, Dr. Herbert Schneider and Dr. Edgar S. Brightman. Inquiries concerning membership may be directed to the Secretary, Dr. Oliver Martin, University of Rhode Island, Kingston, R.I. Annual dues are \$1.00.

Books Received

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- Auger, Pierre: *L'homme microscopique: Essai de Monadologie*. Paris: Librairie Ernest Flammarion, 1952. 234 pp. 540 fr.
- Bagolini, Luigi: *La Simpatia nella Morale e nel Diritto: Aspetti del Pensiero di Adam Smith*. Bologna: Cesare Zuffi, 1952. 119 pp. L. 800.
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